ECLIPSES OF THE MOON IN INDIA

CONTINUATION OF THE "INDIAN CALENDAR"

ECLIPSES OF THE MOON IN INDIA

BY

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PREFACE

THE present volume has been prepared in continuation of the "Indian Calendar", which contained, *inter alia,* Tables drawn up by Dr. Robert Schram for determining questions connected with eclipses of the sun in India for a period of 1600 years. The eclipses of the moon are now dealt with, and a few notes added.

I desire to express my best thanks for their kind advice and assistance to Professor H. H. Turner, of Oxford, and Mr. A. C. D. Crommelin, of the Royal Observatory, Greenwich.

Pandit Śaṅkara Bâlkṛishṇa Dîkshit, whose death early in the present year is greatly to be deplored, rendered valuable help by checking my figures.

June, 1898.

R. SEWELL.

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ECLIPSES OF THE MOON IN INDIA

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INTRODUCTION, RULES, AND EXAMPLES.

THE following Tables will be found to contain all that is necessary for the determination of the actual time of occurrence of eclipses of the moon for the period of sixteen hundred years, from A.D. 300 to 1900. The calculations in Table E. have been based on von Oppolzer's *Canon der Finsternisse* (*Denkschriften der Mathematisch naturwissen schaftlichen classe der Kais. Akademie der Wissenschaften in Wien, Vol. LII.*, 1887). All eclipses are included, whether visible or invisible. Visibility at a given spot, if not apparent on the face of Table E., must be tested according to the rules hereinafter given.

The results obtained will be closely approximate, but are liable to small errors of a minute or two, owing to minor inequalities in the moon's motion which have been left out of account by Oppolzer. Table G. also is similarly liable to slight variations, for reasons which will be noted below. Absolute exactness is impossible under the circumstances, and it would be useless to attempt more than is given in this volume.

A comparison between the times fixed by Oppolzer's *Canon* and by the *Nautical Almanacks* since the year 1767 (*see Table H.*) will shew how even the most reliable authorities differ in their calculations.

A lunar eclipse is visible in the same degree on every part of the earth's surface which, during any part of its occurrence, is turned away from the sun and towards the moon—then at the full and on the other side of the earth; or, in other words and speaking broadly, on any meridian between the hours of sunset and sunrise. For Indian purposes, therefore, the calculations for these tables have been made for the meridian of Laṅka (Ujjain), *i.e.* Greenwich East Longitude 75° 46′, and the necessary time-correction, 5 h. 3 m., has been applied to the *Canon* figures which were prepared for the meridian of Greenwich. All times are measured from mean sunrise at Laṅka, taken as 6 A.M.

Von Oppolzer calculated every eclipse in apparent time; and then, for civil purposes, changed this to mean- or clock-time for the meridian of Greenwich by applying the daily equation of time. The tables in the present volume give similar mean time for the meridian of Laṅka.

No account has been taken of the effect produced on the moon by the penumbra, but

only of her passage across the cone of complete shadow. In actual observation little change is witnessed until the phenomenon of positive occultation, or positive alteration of the shape of the illuminated surface, takes place. Moreover I am assured by Pandit Śaṅkara Bâlkṛishṇa Dîkshit that in Hindu astronomical works only the latter is taken into account.

The dates given in Col. 1 of Table E. will sometimes be found to be one day behind those given in the *Canon*. This is due to a different meridian having been selected as base. Thus the *Canon* fixes, for Greenwich, an eclipse as having occurred on October 25th, A.D. 310, of which the greatest phase was seen at "0.5", *i.e.*, 0 h. 5 m. after midnight on the 24th-25th October. This moment, on the meridian of Laṅka, was 5 h. 8 m. A.M. But we begin our day throughout this work, for Indian purposes, from mean sunrise at Laṅka, taken as 6 A.M. Hence the moment of greatest phase of this eclipse must be recorded as "23 h. 8 m." and the day must be altered to October 24th, which means the same thing. The beginning was "21.24" on 24th; and the end, which took place at Greenwich mean time 1 h. 49 m. A.M., the hour at Laṅka being then 6.52 A.M., or 52 minutes after sunrise, is recorded as "24.52". This obviates the inconvenience of having to enter two dates for the eclipse. In other words, whenever an eclipse happens on portions of two different days, it is recorded under the earlier day, and the hours of the later phases of the eclipse are carried beyond 24. General Cunningham seems not to have noticed this time-difference, due to longitude, in the list of eclipses he published in his "*Indian Eras*", which is therefore apt to mislead.

I have added to the list the days of the week corresponding to the dates given in Col. 1.

I have also worked out and recorded (*Col. 2*) the Hindu month, and current Śaka year in each case. For the latter purpose I adopt only one reckoning out of the several in use, viz., the full-moon (*pûrṇimâ*) day of the month in the Chaitrâdi Śaka year. The month is the same whether the amânta or pûrṇimânta reckoning be used. For other modes of reckoning it will be necessary to convert the dates according to the rules given in the "*Indian Calendar*".

The name given to the month in question by the Hindus necessarily varies with their diversity of practice (prior to about 1100 A.D.) in the interpolation of a month in intercalary years, some using the true and some the mean system; and this difference of name is shewn by a double entry in Col. 2. In such case the earlier entry refers throughout to the true system, the later to the mean system, and to this is prefixed the letters "*w. m. i.*" *i.e.* "with mean intercalations." When the month in which the eclipse occurs bears the name of an intercalated month, so that there are in that year two months having the same name, I have distinguished them by numbers, at the suggestion of Professor Kielhorn. Such a system is safer than entering a name; in view of the difference in the nomenclature adopted at different times and in different tracts.

For the magnitude of the eclipse (*Col. 8*) I adopt the *Canon* figures, with the sole exception that I have not thought it necessary to record magnitudes higher than total. For these last, the letter "*t*" suffices.

A note on the page of Table E. containing the entry for A.D. 1582 explains fully the "Old" and "New" Style of A.D. reckoning, and shews why, between A.D 1582 and 1752, my dates differ from those given in the *Canon*. The subject is fully discussed in Nicholas's *Chronology of History*, pp. 34—48.

The figures given in Table E. will often shew, without further examination, that an eclipse must have been visible all over India, or invisible in any part of that country; but often

the question remains doubtful, and in such case the actual visibility at any given spot must be ascertained.

For this purpose it is necessary (*a*) to alter the hour given in Table E. to suit the longitude of the given place; (*b*) to convert the mean time of the table into apparent (or true) time; (*c*) to find the moment of sunrise or sunset on the day and at the place in question.

(*a*) The time-correction for longitude is plus one minute of time for every 15′ of longitude east of, or greater than, the base meridian (75° 46′), and minus one minute of time for every 15′ west of, or less than, the same. Four minutes of time to one degree of longitude.

(*b*) Table F. gives the equation of time in minutes, for intervals of five days throughout the year for the period covered by the principal table. (If it is at any time desired to convert apparent time into mean time, this can be done by using the table with reversed signs.)

(*c*) Table G., copied from Raper's *Practice of Navigation* Table 26, but with the days of the year added to the sun's declination in degrees in order to facilitate work, gives the hours and minutes of sunrise and sunset in different latitudes on different days. I have ventured to add the days of the year to this table, because there are no almanacks extant in India earlier than those of the last few decades to which reference can be made in order to ascertain the sun's declination on any given day. It is true that the inclusion of the days of the year introduces, in distant epochs, small errors due to various causes, such as the change in the obliquity of the ecliptic, and of the perihelion point of the earth's orbit. But the sum of these would not amount to much;[1] and if the little Table given in Rule 5 below be used, which brings Old Style dates into harmony with the present Calendar, these slight variations in the sun's declination may well be left out of account.

Another variation is caused by the fact that, since the moon is actually at the full at mid-eclipse, she is not quite full at the beginning, and she is a little past the full at the end of the eclipse. For localities such as India, no part of which is very far distant from the equator, this variation, even in the extreme case of an eclipse prolonged to a duration of four hours, would not amount to more than four minutes.

If all these variations operated in one direction the time-difference so caused might of course amount to several minutes, but it often, indeed generally, happens that one cause of variation works against and helps to annul another. At the worst they only affect the question of the visibility at the last few moments of an eclipse ending when the moon is just rising, or the first few moments of an eclipse beginning when the moon is just setting; and since the difference is then compensated by the effects produced by refraction, it is not necessary to consider them. The beginning or ending of an eclipse cannot be generally observed nearer than one minute, and sometimes two or three minutes of time, even under the most favourable conditions.

I have thought it advisable to give a list of eclipses as fixed by the *Nautical Almanack* since A.D. 1767, the date of its first publication. These may be compared with the data obtained from Oppolzer's Canon. I have reduced the actual figures given in the *Nautical Almanack* to our requirements *(1)* by altering the hour to suit the Indian system, according to which the day begins at mean sunrise (6 A.M.) on the meridian of Laṅka, *(2)* by applying the time-difference between the longitudes of Greenwich and Laṅka, and, *(3)* up to the year 1834, by applying the daily equation of time. Since 1834 the *Nautical Almanack* figures are themselves given in

1 Probably not more than half a degree, or two minutes of time, for two years differing as much as possible. (*Professor Turner.*)

mean time. Table H. therefore gives the *Nautical Almanack* fixtures on the basis of the system adopted in Table E., and one or the other may be used at pleasure in examining eclipses in India. The *Connaissance des Temps* was commenced about a century earlier than the *Nautical Almanack,* but in those early years the lunar tables used were so imperfect that Oppolzer's *Canon* is the more reliable work. Indeed the *Canon* is probably more accurate than the *Almanack* up to about 1821 A.D., when Burchardt's tables were introduced into the latter's calculations.

The next point will be to consider within what limits the figures given in Table E. or H. may be taken to prove conclusively that an eclipse was invisible in any part of India on the day in question.

Let it be remembered that those figures relate to mean or clock time measured from 6 A.M., or approximate sunrise on the meridian of Laṅka, or Ujjain, Gr. E. Long. 75° 46′, latitude 0° 0′.

At that point, given no minor variations and no refraction, every eclipse was invisible which fell entirely between 0 h. and 12 h. in columns 4 to 7 of Tables E. or H.

But to be quite safe we will allow 5 minutes for possible variations, and reduce the limits to 0 h. 5 m. and 11 h. 55 m.

The greatest possible difference between mean and apparent time was in about A.D. 300, when it was as high as ± 20 m.; at present the differences lie between −14 m. and +16 m. To be quite certain we will allow 20 m. This reduces the limits to 0 h. 25 m. and 11 h. 35 m.

The outside differences due to longitude are, westwards 75° 46′−66° 45′ (Karâchi), or 9°, or 36 m. of time, and eastwards 97° (East of Assam) −75° 46′, or 21° 14′, or 1 h. 25 m. of time.

The outside parallel of north latitude is 36° (Gilgit). Here, and relatively in a less degree for places further south, the prolongation of daylight at certain seasons may well render invisible an eclipse visible at the equator; but we have only to consider the converse case, viz. the most extreme case of late sunrise and early sunset which may render visible an eclipse otherwise invisible. This occurs at the winter solstice, when in latitude 36° (*Table* G.) the sun rises at 7 h. 14 m. A.M and sets at 4 h. 46 m. P.M. Difference 1 h. 14 m. both in the morning and the evening. If the extreme limits of both longitude and latitude were separately considered and applied, our outside limits would thus be reduced to (0 h. 25 m. + 0 h. 36 m. + 1 h. 14 m. =) 2 h. 15 m., and [11 h. 35 m.—(1 h. 25 m. + 1 h. 14 m.) =] 8 h. 56 m.

But it is not necessary to allow for such a wide limit. We can ascertain [1] the outside difference for longitude and latitude combined, by drawing on a map great circles inclined at an angle of 27½° to the meridian (this angle being the actual angle at which the sunrise or sunset lines intersect the meridians in India at the time of the solstices) just touching the furthest east and west limits of India, and producing them to meet the equator. The western great circle cuts the equator about Gr. E. long. 54¼°, or 21½° west of Laṅka, equivalent to 1 h. 26 m. of time-difference, and the eastern great circle cuts the equator about Gr. E. long. 109°, or 33¼° E. of Laṅka, equivalent to 2 h. 13 m. of time-difference. Applying these outside time-differences to the limits of 0 h. 25 m. and 11 h. 35 m. already obtained, we have (0 h. 25 m. + 1 h. 26 m. =) 1 h. 51 m., and (11 h. 35 m.—2 h. 13 m. =) 9 h. 22 m. No eclipse could by any possibility be visible in any part of India, provided the whole fell within these limits. I have really exceeded the requirements of the case in fixing these limits, but the error, if one there be, is on the right side.

[1] I am indebted to Mr. Crommelin for this. Similar results are arrived at by calculation from Raper's Table *(Table G. below)*.

It may be as well to point out that these Tables are applicable not only to India, but to all places in the world lying between N. Lat. 0° and 39°. To use them for mean or clock time for any part of the globe, it is only necessary to apply to the figures given in Table E. the time-difference for longitude (4 minutes to a degree) east or west of our base-meridian, which is, as stated, 75° 46′ east of Greenwich. This gives the hour of eclipse by the clock on any meridian in latitude 0°. For apparent time Table F. is applicable to all parts of the world. To find the hour of sunset or sunrise Table G. may be used for any place between the equator and N. Lat. 39°.

RULES, AND USE OF TABLES.

Rule I. Note the details regarding the eclipse given in Table E.

On any date and for any place in India the eclipse was invisible if it occurred altogether between 1.51 and 9.22.

If its beginning or ending overstep these limits the eclipse may have been visible at some place in India. In such case it must be examined.

Rule II. In case an examination is necessary take the latitude and longitude of the place in question. Table XI. of the "*Indian Calendar*" (p. cxix) may be used, or a reliable map.

Rule III. Correct Table E. for longitude, thus;—Laṅka longitude, or the longitude of the base meridian of the Tables, being 75° 46′ east of Greenwich, add one minute of time for every 15′ of longitude east of this, and deduct one minute of time for every 15′ of longitude west of it.

Rule IV. To find the apparent or true time of eclipse, apply to the figures given in E., the correction noted in Table F.

Rule V. Then consider the latitude of the place. The moment of the occurrence of the different phases of the eclipse will remain unaffected, but the visibility of the eclipse depends on the time of sunrise or sunset in this locality, and this varies with the latitude.

Table G. gives these hours of sunrise and sunset. But for Old Style dates a correction is necessary, which is supplied by the little Table below. It must be borne in mind that this

OLD STYLE ADJUSTMENT FOR USE OF TABLE G.

A.D.												
500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700
1	2	3	3	4	5	6	6	7	8	9	9	10

N.B. No adjustment is necessary before A.D. 500, *or after A.D.* 1752.

alteration of date is *solely for use of Table G.*, the English date of eclipse remaining unaffected. Where necessary, therefore, *add* to the day given in Table E. the number of days noted in this sub-Table, and then use Table G. to ascertain the duration of daylight on the day of eclipse at the latitude in question.

EXAMPLES.

1. Eclipse of December 2, 1750. This began at 3 h. 32 m. after 6 A.M. and ended at 7 h. 16 m. It was therefore invisible in any part of India.

2. Eclipse of February 28, 1896. I select this because it can be tested by a reliable almanack. How was it at Madras? Work with Table H. It began at 17.19 and ended at 20.18. Nearly $^{11}/_{12}$ths. of the disc were obscured.

Rule I. It was visible, clearly, in some part of India.

Rule III. Madras E. Long. 80° 13′ 30″ or + 18 m. of time. Apply this, and we have for the beginning 17.37, and for the ending 20.36. This corresponds with the entry in the Madras Asylum Press Almanack, viz., 11.37 P.M. on 28th, and 2.36 A.M. on 29th February.

There is no need to apply Rules IV. or V.

3. Eclipse of November 13, A.D. 300. How was it at Śrînagar in Kashmîr?

It was total and ended at Laṅka at 12.21 (*Table E.*) or 6 h. 21 m. P.M. Correct to apparent time (*Table F.*) (6 h. 21 m. + 17 m. =) 6 h. 38 m. P.M. Totality ended (11 h. 15 m. + 17 m. =) 11 h. 32 m., or 5 h. 32 m. P.M., apparent time. At Laṅka therefore the eclipse was visible for only the last 38 m. of partial obscuration, sunset being at 6.0 P.M. But at Śrînagar (N. Lat. 34° 6′, E. Long. 74° 52′—see the "*Indian Calendar*" *Table XI.*—) the case was different. Correct for longitude. 75°.46′—74°.52′ = 54′ = 4 minutes of time. 6 h. 38 m.—4 m. = 6 h. 34 m. This then was the moment of the end of the eclipse. But the sun set (*Table G.*) at 5 h. 8 m. P.M., so that the eclipse was visible at Śrînagar for an hour and twenty-six minutes after sunset. Totality ended at [5 h. 32 m. P.M.—4 m. (Long.) =] 5 h. 28 m. P.M., so that at Śrînagar the eclipse was total for twenty minutes after sunset.

4. Eclipse of November 25, A.D. 364. This began at Lanka 23.8, or 5 h. 8 m. A.M., mean time on 26th (civil reckoning); + 10 m. for apparent time (*Table F.*), 5 h. 18 m. A.M. It was therefore visible at Laṅka for 42 m. before sunrise. But at Rangoon (Long. 96° 17′, diff. + 1 h. 22 m.) the eclipse began at, apparent time, 6 h. 40 m. A.M., while (*Table G.*) the sun rose (Lat. 16° 46′) at 6 h. 27 m. A.M. Here the eclipse was invisible.

ADDITIONS TO THE "INDIAN CALENDAR."

NUMERALS EXPRESSED BY WORDS.

DATES in Indian inscriptions are often expressed by words, each word representing a numeral, and selected for that purpose according to its meaning. Thus, *bhû* or *chandra* stood for the figure 1, since all the world knows that there is only one earth or one moon. Similarly *paksha* "wing", or *akshi* "eye", conveyed at once the idea of two; *trijagat*, the "three worlds", three; *Pâṇḍava*, five; *avatâra*, ten; and so on. Extending the system with considerable ingenuity, a large number of figures were represented.

The commoner words are given in the enclosed list; which contains, first, the words given by Burnell (*Br.*) in his *South-Indian Palæography*, including those mentioned by Al-Bîrûnî and C. P. Brown, then those added by Dr. Bühler (*Bh.*) (*Grundriss der Indo-Arischen Philologie und Altertumskunde, Indische Palæographie, pp. 80, 81*), lastly some supplied to me by Professor Kielhorn. (*K.*)

Units are generally written first, then tens, hundreds, and thousands. Thus *Rishi-nâga-kh-endu-saṁvatsara* is the year 1087, *guṇa-śâstra-kh-endu-gaṇita saṁvatsara* is 1063.
7 8 0 1
3 6 0 1

0. (*Br.*) Abhra, âkâśa, ambara, ananta, gagaṇa, kha, śûnya, viyat, vyoman. (*K.*) Dyu, nabhas, vindu, Vishṇupada.

1. (*Br.*) Âdi, bhû, chandra, dharâ, dharaṇî, indu, kshiti, kshmâ, nâyaka, pitâmaha, pṛithivî, raśmi, rûpa, śaśâṅka, śaśin, śîtâṁśu, soma, tanu, urvarâ, vasudhâ. (*Bh.*) Mâhî, Sitaraśmi. (*K.*) Atrinayanaja, avani, chandramas, dhâtrî, jagatî, kshapeśvara, kshauṇî, kshoṇî, ku, mṛigâṅka, sudhâṁśu, vasumatî, vidhu.

2. (*Br.*) Akshi, Aśvin, bâhu, Dasra, dṛishṭi, kara, karṇa, kuṭumba, lochana, netra, paksha, ravichandrau, Yama, yamala. (*Bh.*) Nayana. (*K.*) Chakshus.

3. (*Br.*) Agni, dahana, guṇa, hutâśana, jvalana, loka, pâvaka, Râma, sahodara, śikhin, tapana, tri, trigata, triguṇa, trijagat, trikâla, trilochana, trinetra, vahni, vaiśvânara. (*Bh.*) Hotṛi. (*K.*) Anala, Haranayana, śakti, udarchis, veda, vishṭapa.

4. (*Br.*) Abdhi, bandhu, dadhi (?), diś, jalanidhi, jalâśaya, koshṭha, kṛita, sâgara, samudra, udadhi, veda, yuga. (*Bh.*) Aya or âya, śruti, jala, jaladhi. (*K.*) Ambhôdhi, ambudhi, amburâśi, arṇava, Chaturânanavadana, vanadhi, vâridhi, vârinidhi, sindhu.

5. (*Br.*) Artha, bhûta, indriya, ishu, kalamba, mârgaṇa, Pâṇḍava, prâṇa, putra, ratna, śara, sâyaka, suta, tata, vâṇa, viśikha. (*Bh.*) Bâṇa, vishaya. (*K.*) Tryakshamukha.

6. (*Br.*) Aṅga, ari, darśana, mâsârdha, mata, râga, rasa, ṛitu, śastra, tarka. (*Bh.*) Káya.

7. (*Br.*) Adri, aga, aśva, Atri, chhandas, dhâtu, kalatra, mahîdhara, muni, naga, parvata, ṛishi, śaila, svara. (*Bh.*) Dhî. (*K.*) Giri, haya, loka, pâtâla, sagara, sâgara, turaṁgama.

8. (*Br.*) Ahi, bhûtî, dantin, gaja, ibha, maṅgala, nâga, sarpa, vasu. (*Bh.*) Anushṭubh, siddhi. (*K.*) Mûrti, naga, tanu.

9. (*Br.*) Aṅka, antara, chhidra, dvâra, go, graha, nanda, nidhi, pavana, randhra. (*K.*) Grahagaṇa, nidhâna.

10. (*Br.*) Âśâ, avatâra, diś, karman, Râvaṇaśiras.

11. (*Br.*) Akshauhiṇî, Îśvara, lâbha, Mahâdeva, Rudra. (*Bh.*) Îśa, Śiva. (*K.*) Bhava.

12. (*Br.*) Âditya, arka, bhânu, mâsa, sahasrâṁśu, sûrya, vyaya. (*K.*) Dyumaṇi.

13. (*Br.*) Kâma, Kâmadeva, Manmatha, viśva. (*Bh.*) Aghosha, atijagatî.

14. (*Br.*) Indra, Manu, loka. (*K.*) Amarendra, pûrva, ratna.

15. (*Br.*) Ahan, paksha, tithi.

16. (*Br.*) Ashṭi, bhûpa, kalâ, nṛipa.

17. (*Br.*) Atyashṭi.

18. (*Br.*) Dhṛiti.

19. (*Br.*) Atidhṛiti.

20. (*Br.*) Kṛiti, nakha.

21. (*Br.*) Svarga, utkṛiti.

22. (*Br.*) Jâti.

24. (*Br.*) Jina.

25. (*Br.*) Tattva.

26. (*Br.*) Utkṛiti.

The following are said to occur only in documents of late date. (*Br.*)

27. (*Br.*) Nakshatra. (*Bh.*) Bhasamûha.

32. (*Br.*) Danta, Rada.

33. (*Br.*) Deva. (*Bh.*) sura.

34. (*Br.*) Tâna.

40. (*Br.*) Naraka.

49. (*Br.*) Tâna.

NUMERALS EXPRESSED BY LETTERS OR SYLLABLES.

[Dr. Burnell's *South-Indian Palæography* pp. 65, 79, 80, from which most of this note is taken; Dr. Bühler's *Grundriss der Indo-Arischen Philologie und Altertumskunde*, *Indische Palæographie*, pp. 82, 83; *Indian Antiquary*, *II*, pp. 361—2.]

A system of notation by which numerals are expressed by letters of the alphabet is often called the *Katipayâdi* method, from *katipaya*, "a certain number", "so many".

Three systems are known.

A. *The system of Âryabhaṭṭa*, which he used in his treatises on astronomy, but which does not appear to have been adopted by any other writer, or in inscriptions. It is unnecessary to go into this. Professor Kern has edited Âryabhaṭṭa's text.

B. *The chronogram system.* This seems to have originated in Southern India, and has been constantly used in Malabar, Travancore, and the South Tamil country. According to it the consonants of the Sańskṛit alphabet have values given to them, thus:—

k	kh	g	gh	ṅ	ch	chh	j	jh	ñ
1	2	3	4	5	6	7	8	9	0

ṭ	ṭh	ḍ	ḍh	ṇ	t	th	d	dh	n
1	2	3	4	5	6	7	8	9	0

p	ph	b	bh	m
1	2	3	4	5

y	r	l	v	ś	sh	s	h	ḷ
1	2	3	4	5	6	7	8	9

When double letters are used, the last pronounced consonant *only* counts. The order of the numbers is from right to left; thus *Vishṇu* = 54; *Badhnâti annamsasarpi* = 17,750,603.
4 5 3 0 6 0 5 7 7 1

By this system dates may be expressed in words having a connected meaning, and it closely resembles the Semitic system so often used by the Muhammadans. It is also used in Southern India as a *memoria technica* for the contents of the Vedas.

Burnell states that the oldest use of it with which he was acquainted was in Shaḍguruśishya's commentary on the *Ṛigveda Anukramaṇika* (1187 A.D.). It is also used as an aid to remember the rules for calculating horoscopes, and for astronomical tables.

C. *The letter systems.* There are several of these, mostly used for marking the pages and palm-leaves of MSS. They are in use in Burmah and Ceylon as well as in India.

(*a*) According to one system the consonants, with the short *a* vowel added to each, are used in order for representing the numerals 1 to 34; then the series is repeated with long *â*, giving numbers to 68; and so on with the twelve vowels. The series runs—*ka, kha, ga, gha,*
1 2 3 4
ṅa, cha, etc. . . . . *ḷa kâ, khâ, gâ, ghâ, ṅâ, châ,* etc. . . . .
5 6 34 35 36 37 38 39 40
ḷâ, ki, etc.—and goes as far as (12 × 34 =) 408.
68 69

(*b*) Dr. Bühler states that he has found another system in use in the Burmese Pâli MSS. in the Royal Library at Vienna. Here the twelve vowels in order are first used with the first consonant *k*, then with the second consonant *kh*, and so on. This series runs therefore thus;—
ka, kâ, ki, kî, ku, etc. . . . . *kaḥ, kha, khâ, khi, khî, khu,* etc., and
1 2 3 4 5 12 13 14 15 16 17
goes, like the former, as far as 408. In Singhalese books this system is also sometimes adopted, but in that case it includes the southern semi-vowels ṛ, ṛ̤, ḷ, ḷ̤, which gives sixteen

vowels to each consonant and enables the series to run as far as (16 × 34 =) 544. This results, of course, in the letters having a different value from those of the former system; *e.g.*, *kâ* in the first (*a*) system = 35, in the second (*b*) system = 2.

Dr. Bühler states that in Siam and Ceylon there are instances of this last system being prolonged, after the exhaustion of all the syllables ending with *laḥ* (= 408 or 544 as the case may be), by a repetition of the whole system; noted as 2 *ka*, 2 *kâ*, 2 *ki*, 2 *kî*, etc. . . . . . . which would enable numerals to be represented to any extent.

These methods are convenient as numerals for arranging papers or pages in order, but are manifestly useless for simple notation. Thus, if a loose page is picked up bearing the syllable *mû*, it can at once be put in its proper place; but no one could say without reference to a table what actual number *mû* represents.

Numbers in India are often abridged, as in England. We say for instance of the pages of a book "21—2", "243—4". This must not be lost sight of, even in the matter of inscriptions and their dates, remembering that in Europe there is sometimes a similar abbreviation. People speak of the year "ninety-eight", meaning "1798".

There is a system in use in Nepâl and amongst the Jains of N. India where syllables are used in an apparently arbitrary manner, but it is not known in the south. Dr. Burnell treats of this in his "*South-Indian Palæography*" (p. 65). The series is used for numbering pages of books, but I am not aware whether it has ever been employed for chronological purposes.

DETERMINATION OF NAKSHATRAS AND YOGAS.

[See *Ind. Calendar, Arts. 133, 158, 159, pp. 64—65, 97—98.*]

Dr. Schram proposes, in the *Indian Antiquary* for October 1896 (pp. 287—288), a simplification of the method employed by us for the determination of *nakshatras* and *yogas*.

He gives the following table by which (*n*), the *nakshatra*-index, and (*y*) the *yoga*-index may be found at once from the figures for (*t*) and (*c*); thus (*n*) = (*t*) + (*s*). Take down (*t*), and find (*s*) from the table given below, by observing the figure given for (*c*). In the example given by us in Art. 158 we have (*t*) = 1463, (*c*) = 439. From the first column of the following table, observing the difference between consecutive values of (*s*) (*cols.* 2, 3) and using the auxiliary table, (*s*) is found to be 1559. Add (*t*) to (*s*) and we have 3022 = (*n*). (*y*) = (*s*) + (*n*) (*Art. 133*), and both these quantities are found from the table.

This table may be styled Table VII A of the "*Indian Calendar*". It is reprinted by kind permission of the author, and of the editor of the "*Indian Antiquary*".

TABLE VII A.

Arg. *c.*	*s.*	Diff.	Arg. *c.*	*s.*	Diff.	Arg. *c.*	*s.*	Diff.	Arg. *c.*	*s.*	Diff.
0	7147	103	250	9707	100	500	2147	96	750	4586	100
10	7250	104	260	9807	100	510	2243	96	760	4686	101
20	7354	104	270	9907	99	520	2339	96	770	4787	100
30	7458	104	280	6	99	530	2435	96	780	4887	101
40	7562	104	290	105	99	540	2531	97	790	4988	101
50	7666	103	300	204	99	550	2628	96	800	5089	101
60	7769	104	310	303	98	560	2724	97	810	5190	102
70	7873	103	320	401	99	570	2821	96	820	5292	102
80	7976	103	330	500	98	580	2917	97	830	5394	101
90	8079	103	340	598	98	590	3014	97	840	5495	103
100	8182	103	350	696	97	600	3111	97	850	5598	102
110	8285	103	360	793	98	610	3208	97	860	5700	102
120	8388	103	370	891	97	620	3305	97	870	5802	103
130	8491	102	380	988	97	630	3402	98	880	5905	103
140	8593	103	390	1085	97	640	3500	98	890	6008	103
150	8696	102	400	1182	97	650	3598	97	900	6111	103
160	8798	102	410	1279	97	660	3695	99	910	6214	103
170	8900	101	420	1376	97	670	3794	98	920	6317	104
180	9001	102	430	1473	96	680	3892	98	930	6421	103
190	9103	101	440	1569	97	690	3990	99	940	6524	104
200	9204	101	450	1666	96	700	4089	99	950	6628	103
210	9305	101	460	1762	96	710	4188	99	960	6731	104
220	9406	101	470	1858	96	720	4287	100	970	6835	104
230	9507	100	480	1954	96	730	4387	99	980	6939	104
240	9607	100	490	2050	97	740	4486	100	990	7043	104
250	9707		500	2147		750	4586		1000	7147	

AUXILIARY TABLE.

Diff. of *s.*	Last figure of Argument *c.*								
	1	2	3	4	5	6	7	8	9
	Add.								
104	10	21	31	42	52	62	73	83	94
103	10	21	31	41	52	62	72	82	93
102	10	20	31	41	51	61	71	82	92
101	10	20	30	40	51	61	71	81	91
100	10	20	30	40	50	60	70	80	90
99	10	20	30	40	50	59	69	79	89
98	10	20	29	39	49	59	69	78	88
97	10	19	29	39	49	58	68	78	87
96	10	19	29	38	48	58	67	77	86

ADDITION TO THE "INDIAN CALENDAR" TABLE I.

The commencement of the luni-solar year (cols. 19 to 25) throughout Table I of the "Indian Calendar" was calculated for the system of true intercalations of months (cols. 8 to 12). The use of the mean system of intercalations (cols. 8*a* to 12*a*) will, in years following those where an intercalation has taken place by the mean system but not by the true system, throw the initial date a month later than that given in cols. 19 to 25. In such years the invariable intercalation of a month by the true system, when none takes place by the mean system, brings the initial dates under both systems together again in the third year. The following is a list of initial dates (cols. 19 to 25) to be substituted for the present entries in Table I in the years mentioned, *when the mean system of intercalation of months* (cols. 8*a* to 12*a*) *is used.*

The figures already given in Table I, however, may equally well be used if care is taken to remember the number of the month. Thus—suppose that it is necessary to ascertain a date in Chaitra of Kali 3412, where the mean system of intercalations was used. Noting that the month was called "Vaiśâkha I" under the "true" system, the calculation may be made for Vaiśâkha I, using the figures already given in Table I.

I. CONCURRENT YEAR.		III. COMMENCEMENT OF THE LUNI-SOLAR YEAR. (Civil day of Chaitra Śukla 1st.)						
				Moon's age.				
Kali.	A. D.	Day and Month A. D.	Week day.	Lunat. parts elapsed. (*t.*)	Tithis elapsed.	*a.*	*b.*	*c.*
1	5	19	20	21	22	23	24	25
3412	310–11	18 Mar. (77)..........	0 Sat...............	58	·174	52	795	282
3431	329–30	18 Mar. (77)..........	3 Tues..............	180	·540	157	659	282
3450	*348–49	17 Mar. (77)..........	5 Thur..............	78	·234	9924	486	279
3458	*356–57	19 Mar. (79)..........	3 Tues..............	141	·423	84	602	285
3477	375–76	19 Mar. (78).........	5 Thur..............	52	·156	9851	430	282
3496	394–95	19 Mar. (78)..........	1 Sun..........	232	·696	9956	293	282
3515	413–14	19 Mar. (78)..........	4 Wed...............	319	·957	62	157	283
3526	*424–25	17 Mar. (77)..........	2 Mon...............	69	·207	8	904	278
3534	*432–33	19 Mar. (79)..........	0 Sat...............	327	·981	168	20	283
3553	451–52	20 Mar. (79)..........	3 Tues..............	320	·960	273	884	283
3572	470–71	19 Mar. (78)..........	5 Thur..............	45	·135	40	711	281
3580	478–79	21 Mar. (80)..........	3 Tues..............	218	·654	200	828	286
3591	489–90	19 Mar. (78)..........	1 Sun...............	223	·669	146	575	281
3599	497–98	21 Mar. (80)..........	6 Fri...............	318	·954	306	691	286
3618	*516–17	20 Mar. (80)..........	1 Sun...............	196	·588	72	519	284
3637	535–36	20 Mar. (79)..........	3 Tues..............	95	·285	9839	346	281
3656	554–55	20 Mar. (79)..........	6 Fri...............	222	·666	9945	210	281
3675	573–74	20 Mar. (79)..........	2 Mon...............	250	·750	51	73	282
3694	*592–93	20 Mar. (80)..........	5 Thur..............	243	·729	156	937	282
3702	*600–1	21 Mar. (81)..........	2 Mon...............	133	·399	9977	17	284

I. CONCURRENT YEAR.		III. COMMENCEMENT OF THE LUNI-SOLAR YEAR. (Civil day of Chaitra Sukla 1st.)						
				Moon's age.				
Kali.	A. D.	Day and Month A. D.	Week day.	Lunat. parts elapsed. (*t.*)	Tithis elapsed.	*a.*	*b.*	*c.*
1	5	19	20	21	22	23	24	25
3713	611–12	21 Mar. (80)...........	1 Sun...............	270	·810	262	800	282
3721	619–20	22 Mar. (81)...........	5 Thur...............	129	·387	83	881	285
3732	630–31	20 Mar. (79)...........	3 Tues...............	69	·207	29	628	279
3740	638–39	22 Mar. (81)...........	1 Sun...............	190	·570	189	744	285
3759	657–58	21 Mar. (80)...........	3 Tues...............	37	·111	9956	571	282
3778	*676–77	21 Mar. (81)...........	6 Fri...............	258	·774	61	435	282
3797	695–96	21 Mar. (80)...........	1 Sun...............	109	·327	9828	262	280
3816	714–15	21 Mar. (80)...........	4 Wed...............	175	·525	9934	126	280
3835	733–34	21 Mar. (80)...........	0 Sat...............	170	·510	39	989	280
3843	741–42	22 Mar. (81)...........	4 Wed...............	61	·183	9860	70	283
3854	*752–53	21 Mar. (81)...........	3 Tues...............	175	·525	145	853	281
3862	*760–61	22 Mar. (82)...........	0 Sat...............	49	·147	9966	933	283
3873	771–72	22 Mar. (81)...........	6 Fri...............	254	·762	250	717	281
3881	779–80	23 Mar. (82)...........	3 Tues...............	79	·237	72	797	283
3900	798–99	23 Mar. (82)...........	6 Fri...............	200	·600	177	660	284
3919	817–18	22 Mar. (81)...........	1 Sun...............	76	·288	9944	488	281
3938	*836–37	22 Mar. (82)...........	4 Wed...............	303	·909	50	351	281
3957	855–56	22 Mar. (81)...........	6 Fri...............	85	·255	9817	179	279
3965	863–64	24 Mar. (83)...........	4 Wed...............	252	·756	9977	295	284
3976	874–75	22 Mar. (81)...........	2 Mon...............	100	·300	9922	42	279
3984	882–83	23 Mar. (82)...........	6 Fri...............	⊙—19	—·57	9743	122	282
3995	893–94	22 Mar. (81)...........	5 Thur...............	91	273	28	906	279
4003	901–2	23 Mar. (82)...........	2 Mon...............	⊙—23	—·69	9849	986	282
4014	*912–13	22 Mar. (82)...........	1 Sun...............	136	·408	134	769	280
4022	*920–21	23 Mar. (83)...........	5 Thur...............	⊙—17	—·51	9955	850	282
4041	939–40	24 Mar. (83)...........	1 Sun...............	65	·195	60	713	282
4060	958–59	24 Mar. (83)...........	4 Wed...............	241	·723	166	577	283
4079	977–78	23 Mar. (82)...........	6 Fri...............	160	·480	9933	404	280
4098	*996–97	23 Mar. (83)...........	2 Mon...............	318	·954	38	268	280
4106	*1004–5	24 Mar. (84)...........	6 Fri...............	115	·345	9860	348	283
4117	1015–16	23 Mar. (82)...........	4 Wed...............	25	·75	9805	95	278
4125	1023–24	25 Mar. (84)...........	2 Mon...............	242	·726	9965	211	283
4136	1035–35	23 Mar. (82)...........	0 Sat...............	15	·45	9911	958	278
4144	1042–43	25 Mar. (84)...........	5 Thur...............	276	·828	71	75	283
4155	1053–54	23 Mar. (82)...........	3 Tues...............	32	·96	17	822	278
4163	1061–62	25 Mar. (84)...........	1 Sun...............	264	·792	176	939	283
4182	*1080–81	25 Mar. (85)...........	4 Wed...............	290	·870	282	802	284
4201	1099–1100	25 Mar. (84)...........	6 Fri...............	89	·267	49	629	281

⊙ See Text, Art. 101 above, para. 2.

TABLE E.

A. D. Year, Month, and Day.	Hindu Month and Current Śaka Year. ["*w. m. i.*" = with mean intercalations.]	Time measured from Laṅka mean sunrise, taken as 6 A. M. — Greatest phase. [*i.e.* moment of fullmoon] h. m.	Beginning of Eclipse. h. m.	Period of total obscuration. — Beginning. h. m.	Period of total obscuration. — End. h. m.	End of Eclipse. h. m.	Number of twelfths eclipsed. ["*t.*" = total eclipse.]
1	2	3	4	5	6	7	8
300 May 20 Mon.	Jyeshṭha … 223	9 56	8 5	9 6	10 46	11 47	t.
300 Nov. 13 Wed.	Mârgaśîrsha … 223	10 34	8 47	9 53	11 15	12 21	t.
301 May 9 Fri.	Jyeshṭha … 224	10 41	9 44	—	—	11 38	3·1
301 Nov. 3 Mon.	Kârttika, (*w. m. i.*) Mârgaśîrsha … 224	1 3	0 42	—	—	1 24	0·4
303 Mar. 19 Fri.	Chaitra … 226	20 52	19 6	20 16	21 28	22 38	t.
303 Sept. 12 Sun.	Âsvina … 226	18 13	16 34	18 6	18 20	19 52	t.
304 Mar. 8 Wed.	Chaitra … 227	13 28	11 43	12 54	14 2	15 13	t.
304 Aug. 31 Thur.	Bhâdrapada, (*w. m. i.*) Bhâdrapada II … 227	19 50	18 3	19 10	20 30	21 37	t.
305 Aug. 21 Tues.	Bhâdrapada … 228	4 27	4 4	—	—	4 50	0·5
306 July 12 Fri.	Śrâvaṇa … 229	12 8	11 4	—	—	13 12	4·0
307 Jan. 5 Sun.	Mâgha … 229	15 40	13 56	15 9	16 11	17 24	t.
307 July 2 Wed.	Âshâḍha … 230	4 30	2 39	3 40	5 20	6 21	t.
307 Dec. 25 Thur	Pausha … 230	18 52	17 7	18 18	19 26	20 37	t.
308 June 20 Sun.	Âshâḍha … 231	15 58	14 34	—	—	17 22	7·6
308 Dec. 14 Tues.	Pausha … 231	5 16	4 55	—	—	5 37	0·4
310 Apr. 30 Sun.	Vaiśâkha II, (*w. m. i.*) Vaiśâkha … 233	7 2	5 31	—	—	8 33	9·2
310 Oct. 24 Tues.	Kârttika … 233	23 8	21 24	22 38	23 38	24 52	t.
311 Apr. 19 Thur.	Vaiśâkha … 234	14 37	12 47	13 50	15 24	16 27	t.
311 Oct. 14 Sun.	Kârttika … 234	6 10	4 24	5 34	6 46	7 56	t.
312 Apr. 8 Tues.	Vaiśâkha … 235	4 47	3 57	—	—	5 37	2·4
313 Feb. 27 Fri.	Phâlguna … 235	12 56	12 17	—	—	13 35	1·4
314 Feb. 16 Tues.	Phâlguna … 236	24 46	22 59	24 4	25 28	26 33	t.
314 Aug. 12 Thur.	Bhâdrapada … 237	3 29	1 43	2 54	4 4	5 15	t.
315 Feb. 6 Sun.	Phâlguna … 237	5 20	3 41	—	—	6 59	11·9
315 Aug. 1 Mon.	Śrâvaṇa … 238	19 27	17 42	18 54	20 0	21 12	t.
317 June 11 Tues.	Ashâḍha … 240	13 35	12 19	—	—	14 51	6·0
317 Dec. 5 Thur.	Pausha … 240	3 56	2 11	3 22	4 30	5 41	t.
318 May 31 Sat.	Jyeshṭha … 241	16 18	14 26	15 26	17 10	18 10	t.
318 Nov. 24 Mon.	Mârgaśîrsha … 241	19 29	17 42	18 48	20 10	21 16	t.
319 May 20 Wed.	Jyeshṭha … 242	17 14	16 4	—	—	18 24	4·8
319 Nov. 14 Sat.	Mârgaśîrsha … 242	9 43	9 20	—	—	10 6	0·5
321 Mar. 30 Thur.	Chaitra … 244	4 48	3 4	4 17	5 19	6 32	t.
321 Sept. 22 Fri.	Âśvina … 244	25 33	23 56	—	—	27 10	11·3
322 Mar. 19 Mon.	Chaitra … 245	21 27	19 41	20 49	22 5	23 13	t.
322 Sept. 12 Wed.	Âśvina … 245	3 19	1 31	2 36	4 2	5 7	t.
323 Sept. 1 Sun.	Bhâdrapada, (*w. m. i.*) Bhâdrapada II … 246	12 17	11 37	—	—	12 57	1·5
324 July 22 Wed.	Śrâvaṇa … 247	19 43	18 51	—	—	20 35	2·6
325 Jan. 15 Fri.	Mâgha … 247	23 35	21 52	23 7	24 3	25 18	t.
325 July 12 Mon.	Śrâvaṇa … 248	11 51	10 1	11 3	12 39	13 41	t.
326 Jan. 5 Wed.	Mâgha … 248	3 14	1 29	2 39	3 49	4 59	t.
326 July 1 Fri.	Âshâḍha … 249	22 53	21 22	—	—	24 24	9·2
326 Dec. 25 Sun.	Pausha … 249	14 4	13 38	—	—	14 30	0·6
328 May 10 Fri.	Jyeshṭha … 251	13 48	12 24	—	—	15 12	7·6
328 Nov. 4 Mon.	Mârgaśîrsha … 251	7 40	5 57	7 14	8 6	9 23	t.
329 Apr. 29 Tues.	Vaiśâkha II, (*w. m. i.*) Vaiśâkha … 252	21 55	20 4	21 5	22 45	23 46	t.
329 Oct. 24 Fri.	Kârttika … 252	14 15	12 29	13 38	14 52	16 1	t.
330 Apr. 19 Sun.	Vaiśâkha … 253	12 27	11 25	—	—	13 29	3·8
331 Mar. 10 Wed.	Chaitra … 254	21 1	20 38	—	—	21 24	0·5
332 Feb. 28 Mon.	Phâlguna … 254	8 40	6 54	8 2	9 18	10 26	t.
332 Aug. 22 Tues.	Bhâdrapada … 255	11 18	9 35	10 50	11 46	13 1	t.

TABLE E.

A. D. Year, Month, and Day.	Hindu Month and Current Śaka Year. ["w. m. i." = with mean intercalations.]		Time measured from Lanka mean sunrise, taken as 6 A. M. Greatest phase. [i.e. moment of fullmoon] h.	m.	Beginning of Eclipse. h.	m.	Period of total obscuration. Beginning. h.	m.	Period of total obscuration. End. h.	m.	End of Eclipse. h.	m.	Number of twelfths eclipsed. ["t." = total eclipse.]
1	2		3		4		5		6		7		8
333 Feb. 16 Fri.	Phâlguna	255	12	59	11	19	12	43	13	15	14	39	t.
333 Aug. 12 Sun.	Bhâdrapada	256	3	17	1	30	2	38	3	56	5	4	t.
335 June 22 Sun.	Âshâḍha	258	20	18	19	13	—		—		21	23	4·1
335 Dec. 16 Tues.	Pausha	258	12	51	11	6	12	17	13	25	14	36	t.
336 June 10 Thur.	Ashâḍha	259	22	40	20	49	21	50	23	30	24	31	t.
336 Dec. 5 Sun.	Pausha	259	4	25	2	38	3	44	5	6	6	12	t.
337 May 30 Mon.	Jyeshṭha II, (w. m. i.) Jyeshṭha	260	23	46	22	25	—		—		25	7	7·0
337 Nov. 24 Thur.	Mârgaśîrsha	260	18	27	18	6	—		—		18	48	0·4
339 Apr. 10 Tues.	Vaiśâkha	262	12	36	10	54	12	14	12	58	14	18	t.
339 Oct. 4 Thur.	Âśvina II, (w. m. i.) Kârttika	262	9	8	7	33	—		—		10	43	10·6
340 Mar. 30 Sun.	Chaitra	263	5	22	3	34	4	40	6	4	7	10	t.
340 Sept. 22 Mon.	Âśvina	263	11	6	9	16	10	20	11	52	12	56	t.
341 Sept. 11 Fri.	Âśvina	264	20	17	19	26	—		—		21	8	2·5
342 Aug. 3 Tues.	Śrâvaṇa II, (w. m. i.) Bhâdrapada I	265	3	29	2	50	—		—		4	8	1·4
343 Jan. 27 Thur.	Mâgha	265	7	32	5	50	7	8	7	56	9	14	t.
343 July 23 Sat.	Śrâvaṇa	266	19	17	17	28	18	34	20	0	21	6	t.
344 Jan. 16 Mon.	Mâgha	266	11	38	9	52	11	2	12	14	13	24	t.
344 July 12 Thur.	Śrâvaṇa	267	5	51	4	15	—		—		7	27	11·0
345 Jan. 4 Fri.	Mâgha	267	22	48	22	22	—		—		23	14	0·6
346 May 21 Wed.	Jyeshṭha	269	20	31	19	16	—		—		21	46	5·8
346 Nov. 15 Sat.	Mârgaśîrsha	269	16	12	14	30	15	48	16	36	17	54	t.
347 May 11 Mon.	Jyeshṭha	270	5	10	3	18	4	19	6	1	7	2	t.
347 Nov. 4 Wed.	Mârgaśîrsha	270	22	22	20	36	21	44	23	0	24	8	t.
348 Apr. 29 Fri.	Vaiśâkha	271	20	4	18	51	—		—		21	17	5·4
350 Mar. 10 Sat.	Chaitra	273	16	25	14	40	15	51	16	59	18	10	t.
350 Sept. 2 Sun.	Bhâdrapada II, (w. m. i.) Âśvina I	273	19	13	17	32	18	54	19	32	20	54	t.
351 Feb. 27 Wed.	Phâlguna	273	20	27	18	44	20	2	20	52	22	10	t.
351 Aug. 23 Fri.	Bhâdrapada	274	11	15	9	27	10	32	11	58	13	3	t.
352 Aug. 12 Wed.	Bhâdrapada	275	3	27	3	1	—		—		3	53	0·6
353 July 3 Sat.	Âshâḍha II	276	3	2	2	14	—		—		3	50	2·2
353 Dec. 26 Sun.	Pausha	276	21	41	19	56	21	8	22	14	23	26	t.
354 June 22 Wed.	Âshâḍha	277	5	4	3	14	4	16	5	52	6	54	t.
354 Dec. 16 Fri.	Pausha	277	13	21	11	34	12	40	14	2	15	8	t.
355 June 11 Sun.	Âshâḍha	278	6	20	4	51	—		—		7	49	8·7
355 Dec. 6 Wed.	Pausha	278	3	10	2	49	—		—		3	31	0·4
357 Apr. 20 Sun.	Vaiśâkha	280	20	20	18	42	—		—		21	58	11·6
357 Oct. 14 Tues.	Kârttika	280	16	50	15	17	—		—		18	23	10·1
358 Apr. 10 Fri.	Vaiśâkha	281	13	8	11	18	12	21	13	55	14	58	t.
358 Oct. 3 Sat.	Âśvina II, (w. m. i.) Kârttika	281	19	1	17	11	18	14	19	48	20	51	t.
359 Mar. 31 Wed.	Chaitra	282	2	11	1	50	—		—		2	32	0·4
359 Sept. 23 Thur.	Âśvina	282	4	23	3	25	—		—		5	21	3·2
361 Feb. 6 Tues.	Phâlguna	283	15	14	13	33	14	54	15	34	16	55	t.
361 Aug. 3 Fri.	Śrâvaṇa, (w. m i.) Śrâvaṇa II	284	2	47	1	1	2	9	3	25	4	33	t.
362 Jan. 26 Sat.	Mâgha	284	19	54	18	8	19	16	20	32	21	40	t.
362 July 23 Tues.	Śrâvaṇa	285	12	51	11	11	12	39	13	3	14	31	t.
363 Jan. 16 Thur.	Mâgha	285	7	31	7	0	—		—		8	2	0·9
364 June 1 Tues.	Jyeshṭha II, (w. m. i.) Jyeshṭha	287	3	12	2	8	—		—		4	16	4·0
364 Nov. 25 Thur.	Mârgaśîrsha	287	24	50	23	8	24	26	25	14	26	32	t.
365 May 21 Sat.	Jyeshṭha	288	12	21	10	29	11	29	13	13	14	13	t.
365 Nov. 15 Tues.	Mârgaśîrsha	288	6	30	4	44	5	52	7	8	8	16	t.

TABLE E.

A. D. Year, Month, and Day.	Hindu Month and Current Saka Year. ["*w.m.i.*" = with mean intercalations.]		Time measured from Lañka mean sunrise, taken as 6 A. M.					Number of twelfths eclipsed. ["*t.*"=total eclipse.]
			Greatest phase. [*i.e.* moment of fullmoon]	Beginning of Eclipse.	Period of total obscuration. Beginning.	Period of total obscuration. End.	End of Eclipse.	
			h. m.	h. m.	h. m.	h. m.	h. m.	
1	2		3	4	5	6	7	8
366 May 11 Thur.	Jyeshṭha	289	3 32	2 12	—	—	4 52	6·9
366 Nov. 4 Sat.	Mârgaśîrsha	289	6 15	6 0	—	—	6 30	0·2
368 Mar. 20 Thur.	Chaitra	291	23 53	22 10	23 28	24 18	25 36	t.
368 Sept. 13 Sat.	Âśvina	291	3 21	1 42	—	—	5 0	11·9
369 Mar. 10 Tues.	Chaitra	292	3 44	1 59	3 10	4 18	5 29	t.
369 Sept. 2 Wed.	Bhâdrapada, (*w. m. i.*) Âśvina I	292	19 18	17 28	18 32	20 4	21 8	t.
370 Aug. 23 Mon.	Bhâdrapada	293	11 12	10 29	—	—	11 55	1·7
371 July 14 Thur.	Śrâvaṇa	294	9 48	9 27	—	—	10 9	0·4
372 Jan. 7 Sat.	Mâgha	294	6 31	4 47	5 59	7 3	8 15	t.
372 July 2 Mon.	Âshâḍha II, (*w. m. i.*) Âshâḍha	295	11 30	9 42	10 47	12 13	13 18	t.
372 Dec. 26 Wed.	Pausha	295	22 14	20 27	21 32	22 56	24 1	t.
373 June 21 Fri.	Âshâḍha	296	12 55	11 20	—	—	14 30	10·7
373 Dec. 16 Mon.	Pausha	296	11 53	11 32	—	—	12 14	0·4
375 May 2 Sat.	Vaiśâkha II, (*w. m. i.*) Vaiśâkha	298	3 59	2 26	—	—	5 32	10·0
375 Oct. 25 Sun.	Kârttika	298	24 40	23 8	—	—	26 12	9·7
376 Apr. 20 Wed.	Vaiśâkha	299	20 45	18 55	19 56	21 34	22 35	t.
376 Oct. 14 Fri.	Kârttika	299	2 58	1 8	2 9	3 47	4 48	t.
377 Apr. 10 Mon.	Vaiśâkha	300	9 35	8 53	—	—	10 17	1·6
377 Oct. 3 Tues.	Âśvina, (*w. m. i.*) Kârttika	300	12 39	11 36	—	—	13 42	3·9
379 Feb. 17 Sun.	Phâlguna	301	22 53	21 14	22 46	23 0	24 32	t.
379 Aug. 14 Wed.	Bhâdrapada	302	10 23	8 39	9 52	10 54	12 7	t.
380 Feb. 7 Fri.	Phâlguna	302	4 2	2 15	3 22	4 42	5 49	t.
380 Aug. 2 Sun.	Śrâvaṇa, (*w. m. i.*) Śrâvaṇa II	303	19 47	18 3	19 18	20 16	21 31	t.
381 Jan. 26 Tues.	Mâgha	303	16 6	15 28	—	—	16 44	1·3
382 June 12 Sun.	Âshâḍha	305	9 52	9 4	—	—	10 40	2·2
382 Dec. 7 Wed.	Pausha	305	9 24	7 42	9 3	9 45	11 6	t.
383 June 1 Thur.	Jyeshṭha II, (*w. m. i.*) Jyeshṭha	306	19 34	17 43	18 44	20 24	21 25	t.
383 Nov. 26 Sun.	Mârgaśîrsha	306	14 41	12 54	14 2	15 20	16 28	t.
384 May 21 Tues.	Jyeshṭha	307	11 4	9 36	—	—	12 32	8·5
384 Nov. 14 Thur.	Mârgaśîrsha	307	14 14	13 53	—	—	14 35	0·4
386 Apr. 1 Wed.	Chaitra	309	7 18	5 38	7 8	7 28	8 58	t.
386 Sept. 24 Thur.	Âśvina	309	11 38	10 1	—	—	13 15	11·2
387 Mar. 21 Sun.	Chaitra	310	10 52	9 5	10 13	11 31	12 39	t.
387 Sept. 14 Tues.	Âśvina	310	3 29	1 39	2 41	4 17	5 19	t.
388 Sept. 2 Sat.	Bhâdrapada, (*w. m. i.*) Âśvina I	311	19 5	18 14	—	—	19 56	2·5
390 Jan. 17 Thur.	Mâgha	312	15 16	13 32	14 45	15 47	17 0	t.
390 July 13 Sat.	Śrâvaṇa	313	18 1	16 16	17 26	18 36	19 46	t.
391 Jan. 7 Tues.	Mâgha	313	7 4	5 16	6 22	7 46	8 52	t.
391 July 2 Wed.	Âshaḍha II, (*w. m. i.*) Âshâḍha	314	19 38	17 57	19 19	19 57	21 19	t.
391 Dec. 27 Sat.	Pausha	314	20 31	20 13	—	—	20 49	0·3
393 May 12 Thur.	Jyeshṭha	316	11 31	10 2	—	—	13 0	8·7
393 Nov. 5 Sat.	Mârgaśîrsha	316	8 39	7 8	—	—	10 10	9·4
394 May 2 Tues.	Vaiśâkha, II (*w. m. i.*) Vaiśâkha	317	4 18	2 26	3 27	5 9	6 10	t.
394 Oct. 25 Wed.	Kârttika	317	11 12	9 22	10 23	12 1	13 2	t.
395 Apr. 21 Sat.	Vaiśâkha	318	16 50	15 53	—	—	17 47	3·1
395 Oct. 14 Sun.	Kârttika	318	21 7	20 2	—	—	22 12	4·2
397 Feb. 28 Sat.	Phâlguna	319	6 20	4 43	—	—	7 57	11·4
397 Aug. 24 Mon.	Bhâdrapada	320	18 4	16 23	17 45	18 23	19 45	t.
398 Feb. 17 Wed.	Phâlguna	320	12 6	10 18	11 24	12 48	13 54	t.
398 Aug. 14 Sat.	Bhâdrapada	321	2 58	1 12	2 21	3 35	4 44	t.

TABLE E.

A. D. Year, Month, and Day.	Hindu Month and Current Śaka Year. ["*w. m. i.*" = with mean intercalations.]		Time measured from Laṅka mean sunrise, taken as 6 A. M. Greatest phase. [*i. e.* moment of fullmoon] h. m	Beginning of Eclipse. h. m.	Period of total obscuration. Beginning. h. m.	Period of total obscuration. End. h. m.	End of Eclipse. h. m.	Number of twelfths eclipsed. ["*t.*" = total eclipse.]
1	2		3	4	5	6	7	8
399 Feb. 6 Sun.	Phâlguna	321	24 37	23 54	—	—	25 20	1·7
400 June 22 Fri.	Âshâḍha	323	16 38	16 15	—	—	17 1	0·5
400 Dec. 17 Mon.	Pausha	323	17 58	16 17	17 38	18 18	19 39	t.
401 June 12 Wed.	Âshâḍha	324	2 48	0 58	2 0	3 36	4 38	t.
401 Dec. 6 Fri.	Pausha	324	22 51	21 4	22 11	23 31	24 38	t.
402 June 1 Sun.	Jyeshṭha II, (*w. m. i.*) Jyeshṭha	325	18 32	16 58	—	—	20 6	10·3
402 Nov. 25 Tues.	Mârgaśîrsha	325	22 14	21 48	—	—	22 40	0·6
404 Apr. 11 Mon.	Vaiśâkha	327	14 32	12 56	—	—	16 8	10·9
404 Oct. 4 Tues.	Kârttika I, (*w. m. i.*) Kârttika	327	19 59	18 23	—	—	21 35	10·9
405 Mar 31 Fri.	Chaitra	328	17 50	16 1	17 6	18 34	19 39	t.
405 Sept. 24 Sun.	Âśvina	328	11 53	10 3	11 4	12 42	13 43	t.
406 Mar. 20 Tues.	Chaitra	329	17 59	17 26	—	—	18 32	1·0
406 Sept. 14 Fri.	Âśvina	329	3 6	2 7	—	—	4 5	3·4
408 Jan. 28 Tues.	Mâgha	330	23 52	22 8	23 23	24 21	25 36	t.
408 July 23 Thur.	Śrâvaṇa	331	24 31	22 49	23 8	24 54	26 13	t.
409 Jan. 17 Sun.	Mâgha	331	15 49	14 1	15 7	16 31	17 37	t.
409 July 13 Tues.	Śrâvaṇa	332	2 21	0 36	1 48	2 54	4 6	t.
410 Jan. 7 Fri.	Mâgha	332	5 7	4 46	—	—	5 28	0·4
411 May 23 Tues.	Jyeshṭha	334	19 5	17 44	—	—	20 26	7·1
411 Nov. 16 Thur.	Mârgaśîrsha	334	16 40	15 10	—	—	18 10	9·1
412 May 12 Sun.	Jyeshṭha	335	11 43	9 51	10 51	12 35	13 35	t.
412 Nov. 4 Mon.	Mârgaśirsha	335	19 29	17 39	18 40	20 18	21 19	t.
413 May 1 Thur.	Vaiśâkha II, (*w. m. i.*) Vaiśâkha	336	23 55	22 48	—	—	25 2	4·5
413 Oct. 25 Sat.	Kârttika	336	5 41	4 32	—	—	6 50	4·7
415 Mar. 11 Thur.	Chaitra	338	13 48	12 14	—	—	15 22	10·3
415 Sept. 5 Sun.	Bhâdrapada II, (*w. m. i.*) Âśvina	338	1 51	0 13	—	—	3 29	11·7
416 Feb. 28 Mon.	Phâlguna	338	20 3	18 14	19 18	20 48	21 52	t.
416 Aug. 24 Thur.	Bhâdrapada	339	10 9	8 21	9 27	10 51	11 57	t.
417 Feb. 17 Sat.	Phâlguna	339	9 3	8 13	—	—	9 53	2·4
418 Dec. 29 Sun.	Pausha	341	2 34	0 53	2 14	2 54	4 15	t.
419 June 23 Mon.	Âshâḍha	342	10 1	8 12	9 17	10 45	11 50	t.
419 Dec. 18 Thur.	Pausha	342	7 4	5 17	6 24	7 44	8 51	t.
420 June 12 Sat.	Âshâḍha	343	2 0	0 21	—	—	3 39	11·9
420 Dec. 6 Mon.	Pausha	343	6 19	5 49	—	—	6 49	0·8
422 Apr. 22 Sat.	Vaiśâkha	345	21 35	20 4	—	—	23 6	9·2
422 Oct. 16 Mon.	Kârttika	345	4 30	2 56	—	—	6 4	10·3
423 Apr. 11 Wed.	Vaiśâkha	346	24 38	22 48	23 50	25 26	26 28	t.
423 Oct. 5 Fri.	Âśvina II, (*w. m. i.*) Kârttika	346	20 22	18 31	19 32	21 12	22 13	t.
424 Mar. 31 Mon.	Chaitra II, (*w. m. i.*) Chaitra	347	0 59	0 9	—	—	1 49	2·4
424 Sept. 24 Wed.	Âśvina	347	11 17	10 13	—	—	12 21	4·0
426 Feb. 8 Mon.	Phâlguna	348	8 24	6 41	7 57	8 51	10 7	t.
426 Aug. 4 Wed.	Śrâvaṇa II, (*w. m. i.*) Bhâdrapada I	349	7 14	5 36	—	—	8 52	11·6
427 Jan. 28 Fri.	Mâgha	349	24 27	22 38	23 43	25 11	26 16	t.
427 July 24 Sun.	Śrâvaṇa	350	9 12	7 25	8 32	9 52	10 59	t.
428 Jan. 18 Wed.	Mâgha	350	13 38	13 17	—	—	13 59	0·4
428 July 12 Thur.	Śrâvaṇa	351	17 58	17 47	—	—	18 9	0·1
429 June 3 Mon.	Jyeshṭha II	352	2 33	1 20	—	—	3 46	5·5
429 Nov. 26 Tues.	Mârgaśîrsha	352	24 46	23 16	—	—	26 16	9·1
430 May 23 Fri.	Jyeshṭha	353	19 6	17 14	18 15	19 57	20 58	t.
430 Nov. 16 Sun.	Mârgaśîrsha	353	3 53	2 3	3 4	4 42	5 43	t.

TABLE E.

A. D. Year, Month, and Day.	Hindu Month and Current Śaka Year. ["*w.m.i.*" = with mean intercalations.]		Time measured from Lanka mean sunrise, taken as 5 A. M. Greatest phase. [*i.e.* moment of full moon] h. m.	Beginning of Eclipse. h. m.	Period of total obscuration. Beginning. h. m.	Period of total obscuration. End. h. m.	End of Eclipse. h. m.	Number of twelfths eclipsed. ["*t.*" = total eclipse.]
1	2		3	4	5	6	7	8
431 May 13 Wed.	Jyeshṭha	354	6 56	5 40	—	—	8 12	6·0
431 Nov. 5 Thur.	Mârgaśirsha	354	14 19	13 9	—	—	15 29	4·9
433 Mar. 21 Tues.	Chaitra	356	20 58	19 27	—	—	22 29	9·3
433 Sept. 15 Fri.	Âśvina	356	9 45	8 10	—	—	11 20	10·8
434 Mar. 11 Sun.	Chaitra	357	3 50	2 0	3 2	4 38	5 40	t.
434 Sept. 4 Tues.	Bhâdrapada II, (*w. m. i.*) Âśvina	357	17 27	15 37	16 41	18 13	19 17	t.
435 Feb. 28 Thur.	Phâlguna	357	17 16	16 18	—	—	18 14	3·2
435 Aug. 24 Sat.	Bhâdrapada	358	18 49	18 18	—	—	19 20	0·9
437 Jan. 8 Fri.	Mâgha	359	10 58	9 17	10 41	11 15	12 39	t.
437 July 3 Sat.	Âshâḍha II	360	17 17	15 31	16 40	17 54	19 3	t.
437 Dec. 28 Tues.	Pausha	360	15 13	13 26	14 33	15 53	17 0	t.
438 June 23 Thur.	Âshâḍha	361	9 30	7 47	9 4	9 56	11 13	t.
438 Dec. 17 Sat.	Pausha	361	14 22	13 51	—	—	14 53	0·9
440 May 3 Fri.	Jyeshṭha I, (*w. m. i.*) Vaiśâkha	363	4 33	3 10	—	—	5 56	7·5
440 Oct. 26 Sat.	Kârttika	363	13 8	11 34	—	—	14 42	10·2
441 Apr. 22 Tues.	Vaiśâkha	364	7 20	5 29	6 30	8 10	9 11	t.
441 Oct. 16 Thur.	Kârttika	364	4 55	3 4	4 5	5 45	6 46	t.
442 Apr. 11 Sat.	Vaiśâkha	365	7 53	6 51	—	—	8 55	3·8
442 Oct. 5 Mon.	Âśvina, (*w. m. i*) Kârttika	365	19 36	18 30	—	—	20 42	4·3
444 Feb. 19 Sat.	Phâlguna	366	16 53	15 11	16 30	17 16	18 35	t.
444 Aug. 14 Mon.	Bhâdrapada	367	14 2	12 29	—	—	15 35	10·1
445 Feb. 8 Thur.	Phâlguna	367	9 0	7 11	8 15	9 45	10 49	t.
445 Aug. 3 Fri.	Śrâvaṇa II, (*w. m. i.*) Bhâdrapada I	368	16 11	14 21	15 25	16 57	18 1	t.
446 Jan. 28 Mon.	Mâgha	368	22 3	21 37	—	—	22 29	0·6
446 July 24 Wed.	Śrâvaṇa	369	1 20	0 38	—	—	2 2	1·6
447 June 14 Sat.	Âshâḍha	370	10 1	8 58	—	—	11 4	3·9
447 Dec. 8 Mon.	Pausha	370	8 52	7 22	—	—	10 22	8·9
448 June 3 Thur.	Jyeshṭha II, (*w. m. i.*) Jyeshṭha	371	2 27	0 36	1 37	3 17	4 18	t.
448 Nov. 26 Fri.	Mârgaśîrsha	371	12 21	10 31	11 32	13 10	14 11	t.
449 May 23 Mon.	Jyeshṭha	372	13 55	12 31	—	—	15 19	7·7
449 Nov. 15 Tues.	Mârgaśîrsha	372	23 1	21 50	—	—	24 12	5·0
451 Apr. 2 Mon.	Vaiśâkha I, (*w. m. i.*) Chaitra	374	4 5	2 38	—	—	5 32	8·2
451 Sept. 26 Wed.	Âśvina	374	17 48	16 15	—	—	19 21	10·0
452 Mar. 21 Fri.	Chaitra	375	11 32	9 42	10 43	12 21	13 22	t.
452 Sept. 14 Sun.	Âśvina	375	24 58	23 8	24 10	25 46	26 48	t.
453 Mar. 11 Wed.	Chaitra	376	1 23	0 18	—	—	2 28	4·1
453 Sept. 4 Fri.	Bhâdrapada II, (*w. m. i.*) Âśvina	376	1 55	1 9	—	—	2 41	2·0
455 Jan. 19 Wed.	Mâgha	377	19 20	17 40	19 8	19 32	21 0	t.
455 July 14 Thur.	Śrâvaṇa	378	24 43	22 59	24 13	25 13	26 27	t.
456 Jan. 8 Sun.	Mâgha	378	23 16	21 29	22 35	23 57	25 3	t.
456 July 3 Tues.	Ashâḍha II	379	17 1	15 15	16 25	17 37	18 47	t.
456 Dec. 27 Thur.	Pausha	379	22 28	21 57	—	—	22 59	0·9
458 May 14 Wed.	Jyeshṭha	381	11 21	10 7	—	—	12 35	5·7
458 Nov. 6 Thur.	Mârgaśirsha	381	21 53	20 20	—	—	23 26	9·9
459 May 3 Sun.	Jyeshṭha I, (*w. m. i.*) Vaiśâkha	382	13 55	12 3	13 3	14 47	15 47	t.
459 Oct. 27 Tues.	Kârttika	382	13 33	11 42	12 43	14 23	15 24	t.
460 Apr. 21 Thur.	Vaiśâkha	383	14 40	13 27	—	—	15 53	5·5
460 Oct. 16 Sun.	Kârttika	383	3 57	2 48	—	—	5 6	4·7
462 Mar. 1 Thur.	Phâlguna	384	25 8	23 28	24 58	25 18	26 48	t.
462 Aug. 25 Sat.	Bhâdrapada	385	21 1	19 32	—	—	22 30	8·7

TABLE E.

A. D. Year, Month, and Day.	Hindu Month and Current Śaka Year. ["*w. m. i.*" = with mean intercalations.]		Time measured from Lanka mean sunrise, taken as 6 A. M. Greatest phase. [*i.e.* moment of fullmoon] h. m.	Beginning of Eclipse. h. m.	Period of total obscuration. Beginning. h. m.	Period of total obscuration. End. h. m.	End of Eclipse. h. m.	Number of twelfths eclipsed. ["*t.*" = total eclipse.]
1	2		3	4	5	6	7	8
463 Feb. 19 Tues.	Phâlguna	385	17 22	15 32	16 36	18 8	19 12	t.
463 Aug. 14 Wed.	Bhâdrapada	386	23 22	21 32	22 33	24 11	25 12	t.
464 Feb. 9 Sun.	Phâlguna	386	6 14	5 41	—	—	6 47	1·0
464 Aug. 3 Mon.	Śrâvaṇa II, (*w. m. i.*) Bhâdrapada I	387	8 52	7 55	—	—	9 49	3·1
465 June 24 Thur.	Ashâḍha	388	17 27	16 39	—	—	18 15	2·2
465 Dec. 18 Sat.	Pausha	388	17 0	15 30	—	—	18 30	8·9
466 June 14 Tues.	Âshâḍha	389	9 40	7 50	8 53	10 27	11 30	t.
466 Dec. 7 Wed.	Pausha	389	20 51	19 0	20 1	21 41	22 42	t.
467 June 3 Sat.	Jyeshṭha II, (*w. m. i.*) Jyeshṭha	390	20 43	19 12	—	—	22 14	9·4
467 Nov. 27 Mon.	Mârgaśîrsha	390	7 55	6 43	—	—	9 7	5·2
469 Apr. 12 Sat.	Vaiśâkha	392	11 7	9 47	—	—	12 27	6·8
469 Oct. 7 Tues.	Kârttika	392	1 58	0 27	—	—	3 29	9·4
470 Apr. 1 Wed.	Vaiśâkha I, (*w. m. i.*) Chaitra	393	19 8	17 16	18 17	19 59	21 0	t.
470 Sept. 26 Sat.	Âśvina	393	8 34	6 44	7 45	9 23	10 24	t.
471 Mar. 22 Mon.	Chaitra	394	9 26	8 15	—	—	10 37	5·0
471 Sept. 15 Wed.	Aśvina	394	9 8	8 12	—	—	10 4	3·0
473 Jan. 30 Tues.	Mâgha	395	3 35	1 56	3 35	3 35	5 14	t.
473 July 25 Wed.	Śrâvaṇa	396	8 16	6 35	7 57	8 35	9 57	t.
474 Jan. 19 Sat.	Mâgha	396	7 14	5 26	6 32	7 56	9 2	t.
474 July 14 Sun.	Śrâvaṇa	397	24 35	22 47	23 52	25 18	26 23	t.
475 Jan. 8 Wed.	Mâgha	397	6 20	5 42	—	—	6 58	1·3
475 July 4 Fri.	Ashâḍha II	398	17 16	17 1	—	—	17 31	0·2
476 May 24 Mon.	Jyeshṭha	399	18 8	17 6	—	—	19 10	3·7
476 Nov. 17 Wed.	Mârgaśîrsha	399	6 43	5 11	—	—	8 15	9·8
477 May 13 Fri.	Jyeshṭha	400	20 24	18 33	19 34	21 14	22 15	t.
477 Nov. 6 Sun.	Mârgaśîrsha	400	22 24	20 33	21 34	23 14	24 15	t.
478 May 2 Tues.	Jyeshṭha I, (*w. m. i.*) Vaiśâkha	401	21 27	20 5	—	—	22 49	7·2
478 Oct. 27 Fri.	Kârttika	401	12 20	11 10	—	—	13 30	4·9
480 Mar. 12 Wed.	Chaitra	403	9 21	7 44	—	—	10 58	11·4
480 Sept. 5 Fri.	Âśvina I, (*w. m. i.*) Âśvina	403	4 8	2 44	—	—	5 32	7·6
481 Mar. 1 Sun.	Phâlguna	403	25 40	23 50	24 52	26 28	27 30	t.
481 Aug. 25 Tues.	Bhâdrapada	404	6 40	4 49	5 50	7 30	8 31	t.
482 Feb. 19 Fri.	Phâlguna	404	14 20	13 40	—	—	15 0	1·5
482 Aug. 14 Sat.	Bhâdrapada	405	16 32	15 24	—	—	17 40	4·6
483 July 6 Wed.	Śrâvaṇa I	406	1 0	0 32	—	—	1 28	0·7
483 Dec. 29 Thur.	Pausha	406	25 9	23 39	—	—	26 39	8·9
484 June 24 Sun.	Âshâḍha	407	16 58	15 10	16 16	17 40	18 46	t.
484 Dec. 18 Tues.	Pausha	407	5 25	3 34	4 35	6 15	7 16	t.
485 June 14 Fri.	Âshâḍha	408	3 33	1 56	—	—	5 10	11·2
485 Dec. 7 Sat.	Pausha	408	16 46	15 35	—	—	17 57	5·1
487 Apr. 23 Thur.	Vaiśâkha	410	18 2	16 51	—	—	19 13	5·1
487 Oct. 18 Sun.	Kârttika	410	10 18	8 48	—	—	11 48	8·9
488 Apr. 12 Tues.	Vaiśâkha	411	2 37	0 45	1 45	3 29	4 29	t.
488 Oct. 6 Thur.	Kârttika I, (*w. m. i.*) Kârttika	411	16 20	14 29	15 30	17 10	18 11	t.
489 Apr. 1 Sat.	Chaitra II, (*w. m. i.*) Chaitra	412	17 20	16 3	—	—	18 37	6·2
489 Sept. 25 Mon.	Aśvina	412	16 32	15 30	—	—	17 34	3·8
491 Feb. 10 Sun.	Phâlguna	413	11 44	10 6	—	—	13 22	11·7
491 Aug. 5 Mon.	Bhâdrapada I, (*w. m. i.*) Bhâdrapada	414	15 48	14 12	—	—	17 24	11·1
492 Jan. 30 Thur.	Mâgha	414	15 10	13 22	14 27	15 53	16 58	t.
492 July 25 Sat.	Śrâvaṇa	415	8 11	6 21	7 24	8 58	10 1	t.

TABLE E.

A.D. Year, Month, and Day.	Hindu Month and Current Śaka Year. ["*w.m.i.*" = with mean intercalations.]	Time measured from Laṅka mean sunrise, taken as 5 A. M.					Number of twelfths eclipsed. ["*t.*" = total eclipse.]
		Greatest phase. [*i.e.* moment of fullmoon]	Beginning of Eclipse.	Period of total obscuration. Beginning.	Period of total obscuration. End.	End of Eclipse.	
		h. m.	h. m.	h. m.	h. m.	h. m.	
1	2	3	4	5	6	7	8
493 Jan. 18 Mon.	Mâgha.......... 415	14 26	13 43	—	—	15 9	1·7
493 July 15 Thur.	Śrâvaṇa.......... 416	0 41	0 2	—	—	1 20	1·4
494 June 5 Sun.	Ashâḍha I.......... 417	0 49	0 3	—	—	1 35	2·0
494 Nov. 28 Mon.	Mârgaśîrsha.......... 417	15 38	14 6	—	—	17 10	9·8
495 May 25 Thur.	Jyeshṭha.......... 418	2 51	1 1	2 3	3 39	4 41	t.
495 Nov. 18 Sat.	Mârgaśîrsha.......... 418	7 13	5 21	6 22	8 4	9 5	t.
496 May 13 Mon.	Jyeshṭha.......... 419	4 6	2 36	—	—	5 36	9·0
496 Nov. 6 Wed.	Mârgaśîrsha.......... 419	20 57	19 46	—	—	22 8	5·0
498 Mar. 23 Mon.	Chaitra.......... 421	17 24	15 50	—	—	18 58	10·4
498 Sept. 16 Wed.	Âśvina.......... 421	11 25	10 7	—	—	12 43	6·5
499 Mar. 13 Sat.	Chaitra.......... 422	9 48	7 58	8 59	10 37	11 38	t.
499 Sept. 5 Sun.	Âśvina I, (*w.m.i*) Âśvina.......... 422	14 12	12 20	13 21	15 3	16 4	t.
500 Mar. 1 Wed.	Phâlguna.......... 422	22 18	21 30	—	—	23 6	2·2
500 Aug. 24 Thur.	Bhâdrapada.......... 423	24 14	23 1	—	—	25 27	5·5
502 Jan. 9 Wed.	Mâgha.......... 424	9 10	7 42	—	—	10 38	8·4
502 July 5 Fri.	Âshâḍha II, (*w.m.i.*) Śrâvaṇa I.......... 425	24 19	22 34	23 44	24 54	26 4	t.
502 Dec. 29 Sun.	Pausha.......... 425	13 52	12 1	13 2	14 42	15 43	t.
503 June 25 Wed.	Âshâḍha.......... 426	10 21	8 40	10 1	10 41	12 2	t.
503 Dec. 19 Fri.	Pausha.......... 426	1 39	0 27	—	—	2 51	5·2
505 May 3 Tues.	Jyeshṭha I, (*w.m.i.*) Vaiśâkha II.......... 428	24 55	23 54	—	—	25 56	3·6
505 Oct. 28 Fri.	Kârttika.......... 428	18 37	17 9	—	—	20 5	8·4
506 Apr. 23 Sun.	Vaiśâkha.......... 429	10 4	8 12	9 12	10 56	11 56	t.
506 Oct. 17 Tues.	Kârttika.......... 429	24 8	22 17	23 18	24 58	25 59	t.
507 Apr. 12 Thur.	Vaiśâkha.......... 430	25 7	23 43	—	—	26 31	7·6
507 Oct. 6 Sat.	Kârttika.......... 430	24 1	22 53	—	—	25 9	4·6
509 Feb. 20 Fri.	Phâlguna.......... 431	19 37	18 1	—	—	21 13	10·9
509 Aug. 15 Sat.	Bhâdrapada.......... 432	23 36	22 3	—	—	25 9	10·1
510 Feb. 9 Tues.	Phâlguna.......... 432	22 45	20 56	22 0	23 30	24 34	t.
510 Aug. 5 Thur.	Śrâvaṇa II, (*w.m.i.*) Bhâdrapada.......... 433	16 0	14 10	15 11	16 49	17 50	t.
511 Jan. 29 Sat.	Mâgha.......... 433	22 13	21 25	—	—	23 1	2·2
511 July 26 Tues.	Śrâvaṇa.......... 434	8 10	7 16	—	—	9 4	2·8
512 June 15 Fri.	Âshâḍha.......... 435	7 26	7 15	—	—	7 37	0·1
512 Dec. 8 Sat.	Pausha.......... 435	24 31	22 59	—	—	26 3	9·7
513 June 4 Tues.	Âshâḍha I, (*w.m.i.*) Jyeshṭha II.......... 436	9 13	7 25	8 31	9 55	11 1	t.
513 Nov. 28 Thur.	Mârgaśîrsha.......... 436	16 8	14 16	15 17	16 59	18 0	t.
514 May 24 Sat.	Jyeshṭha.......... 437	10 46	9 11	—	—	12 21	10·7
514 Nov. 18 Tues	Mârgaśîrsha.......... 437	5 34	4 22	—	—	6 46	5·2
516 Apr. 2 Sat.	Vaiśâkha I, (*w.m.i.*) Chaitra.......... 439	25 17	23 46	—	—	26 48	9·3
516 Sept. 26 Mon.	Âśvina.......... 439	18 49	17 35	—	—	20 3	5·6
517 Mar. 23 Thur.	Chaitra.......... 440	17 45	15 54	16 55	18 35	19 36	t.
517 Sept. 15 Fri.	Âśvina.......... 440	21 48	19 56	20 56	22 40	23 40	t.
518 Mar. 13 Tues.	Chaitra.......... 441	6 4	5 7	—	—	7 1	3·1
518 Sept. 5 Wed.	Bhâdrapada II, (*w.m.i.*) Âśvina.......... 441	8 9	6 51	—	—	9 27	6·5
520 Jan. 20 Mon.	Mâgha.......... 442	17 14	15 46	—	—	18 42	8·4
520 July 16 Thur.	Śrâvaṇa.......... 443	7 35	5 53	7 11	7 59	9 17	t.
521 Jan. 8 Fri.	Mâgha.......... 443	22 23	20 32	21 33	23 13	24 14	t.
521 July 5 Mon.	Âshâḍha II, (*w.m.i.*) Śrâvaṇa I.......... 444	17 8	15 23	16 34	17 42	18 53	t.
521 Dec. 29 Wed.	Pausha.......... 444	10 29	9 16	—	—	11 42	5·4
523 May 15 Mon.	Jyeshṭha.......... 446	7 45	6 59	—	—	8 31	2·0
523 Nov. 9 Thur.	Mârgaśîrsha.......... 446	3 3	1 36	—	—	4 30	8·2

TABLE E.

A. D. Year, Month, and Day.	Hindu Month and Current Śaka Year. ["w. m. i." = with mean intercalations.]	Time measured from Laṅka mean sunrise, taken as 6 A. M. Greatest phase. [i.e. moment of fullmoon] h. m.	Beginning of Eclipse. h. m.	Period of total obscuration. Beginning. h. m.	Period of total obscuration. End. h. m.	End of Eclipse. h. m.	Number of twelfths eclipsed. ["t." = total eclipse.]
1	2	3	4	5	6	7	8
524 May 3 Fri.	Jyeshṭha I, (w. m. i.) Vaiśâkha 447	17 24	15 33	16 34	18 14	19 15	t.
524 Oct. 28 Mon.	Kârttika 447	8 7	6 15	7 16	8 58	9 59	t.
525 Apr. 23 Wed.	Vaiśâkha 448	8 50	7 20	—	—	10 20	9·0
525 Oct. 17 Fri.	Kârttika 448	7 43	6 31	—	—	8 55	5·2
527 Mar. 4 Thur.	Phâlguna II, (w. m. i.) Phâlguna 449	3 23	1 50	—	—	4 56	10·1
527 Aug. 27 Fri.	Bhâdrapada 450	7 27	5 57	—	—	8 57	8·9
528 Feb. 21 Mon.	Phâlguna 450	6 21	4 31	5 34	7 8	8 11	t.
528 Aug. 15 Tues.	Bhâdrapada 451	23 52	22 0	23 1	24 43	25 44	t.
529 Feb. 9 Fri.	Phâlguna 451	5 54	5 1	—	—	6 47	2·7
529 Aug. 5 Sun.	Śrâvaṇa II, (w. m. i.) Bhâdrapada 452	15 47	14 42	—	—	16 52	4·2
530 Dec. 20 Fri.	Pausha 453	9 26	7 54	—	—	10 58	9·7
531 June 15 Sun.	Âshâḍha 454	15 33	13 48	14 59	16 7	17 18	t
531 Dec. 9 Tues.	Pausha 454	25 2	23 10	24 11	25 53	26 54	t.
532 June 3 Thur.	Âshâḍha I, (w. m. i.) Jyeshṭha II 455	17 20	15 38	16 59	17 41	19 2	t.
532 Nov. 28 Sun.	Mârgaśîrsha 455	14 13	13 3	—	—	15 23	4·9
534 Apr. 14 Fri.	Vaiśâkha 457	9 7	7 42	—	—	10 32	7·9
534 Oct. 8 Sun.	Kârttika 457	2 28	1 17	—	—	3 39	5·0
535 Apr. 3 Tues.	Vaiśâkha I, (w. m. i.) Chaitra 458	25 33	23 41	24 41	26 25	27 25	t.
535 Sept. 27 Thur.	Âśvina 458	5 36	3 44	4 45	6 27	7 28	t.
536 Mar. 23 Sun.	Chaitra 459	13 38	12 33	—	—	14 43	4·1
536 Sept. 15 Mon.	Âśvina 459	16 13	14 49	—	—	17 37	7·6
538 Jan. 30 Sat.	Mâgha 460	25 8	23 43	—	—	26 33	7·8
538 July 27 Tues.	Śrâvaṇa 461	14 58	13 21	—	—	16 35	11·5
539 Jan. 20 Thur.	Mâgha 461	6 48	4 57	5 58	7 38	8 39	t.
539 July 16 Sat.	Śrâvaṇa 462	24 0	22 12	23 18	24 42	25 48	t.
540 Jan. 9 Mon.	Mâgha 462	19 14	18 1	—	—	20 27	5·5
541 May 25 Sat.	Jyeshṭha 464	14 29	14 6	—	—	14 52	0·5
541 Nov. 19 Tues.	Mârgaśîrsha 464	11 33	10 6	—	—	13 0	8·2
542 May 14 Wed.	Jyeshṭha 465	24 42	22 52	23 54	25 30	26 32	t.
542 Nov. 8 Sat.	Mârgaśîrsha 465	16 8	14 16	15 17	16 59	18 0	t.
543 May 4 Mon.	Jyeshṭha I, (w. m. i.) Vaiśâkha 466	16 26	14 52	—	—	18 0	10·4
543 Oct. 28 Wed.	Kârttika 466	15 33	14 20	—	—	16 46	5·4
545 Mar. 14 Tues.	Chaitra 468	10 55	9 25	—	—	12 25	9·0
545 Sept. 6 Wed.	Âśvina 468	15 26	14 1	—	—	16 51	7·8
546 Mar. 3 Sat.	Phâlguna 468	13 43	11 53	12 54	14 32	15 33	t.
546 Aug. 27 Mon.	Bhâdrapada 469	7 50	5 58	6 58	8 42	9 42	t.
547 Feb. 20 Wed.	Phâlguna 469	13 29	12 29	—	—	14 29	3·5
547 Aug. 16 Fri.	Bhâdrapada 470	23 25	22 13	—	—	24 37	5·3
548 Dec. 30 Wed.	Pausha 471	18 17	16 45	—	—	19 49	9·7
549 June 25 Fri.	Âshâḍha 472	21 56	20 16	21 42	22 10	23 36	t.
549 Dec. 20 Mon.	Pausha 472	9 58	8 6	9 7	10 49	11 50	t.
550 June 14 Tues.	Âshâḍha 473	23 59	22 14	23 25	24 33	25 44	t.
550 Dec. 9 Fri.	Pausha 473	22 54	21 43	—	—	24 5	5·0
552 Apr. 24 Wed.	Vaiśâkha 475	16 47	15 28	—	—	18 6	6·6
552 Oct. 18 Fri.	Kârttika 475	10 14	9 8	—	—	11 20	4·3
553 Apr. 14 Mon.	Vaiśâkha 476	9 17	7 25	8 25	10 9	11 9	t.
553 Oct. 7 Tues.	Kârttika 476	13 39	11 47	12 48	14 30	15 31	t.
554 Apr. 3 Fri.	Vaiśâkha I, (w. m. i.) Chaitra 477	21 5	19 52	—	—	22 18	5·4
554 Sept. 26 Sat.	Âśvina 477	24 26	22 59	—	—	25 53	8·2
556 Feb. 11 Fri.	Phâlguna 478	8 54	7 31	—	—	10 17	7·5

TABLE E.

A. D. Year, Month, and Day.	Hindu Month and Current Śaka Year. ["*w. m. i.*" = with mean intercalations.]		Time measured from Lañka mean sunrise, taken as 6 A. M. Greatest phase. [*i.e.* moment of full moon] h. m.	Beginning of Eclipse. h. m.	Period of total obscuration. Beginning. h. m.	Period of total obscuration. End. h. m.	End of Eclipse. h. m.	Number of twelfths eclipsed. ["*t.*" = total eclipse.]
1	2		3	4	5	6	7	8
556 Aug. 6 Sun.	Bhâdrapada I, (*w. m. i.*) Bhâdrapada. . .	479	22 24	20 51	—	—	23 57	10·1
557 Jan. 30 Tues.	Mâgha.	479	15 6	13 14	14 15	15 57	16 58	t.
557 July 27 Fri.	Śrâvaṇa.	480	6 54	5 4	6 7	7 41	8 44	t.
558 Jan. 20 Sun.	Mâgha.	480	3 54	2 40	—	—	5 8	5·7
558 July 16 Tues.	Śrâvaṇa.	481	8 50	8 20	—	—	9 20	0·8
559 Nov. 30 Sun.	Mârgaśîrsha.	482	20 5	18 40	—	—	21 30	7·9
560 May 25 Tues.	Jyeshṭha.	483	7 59	6 10	7 15	8 43	9 48	t.
560 Nov. 18 Thur.	Mârgaśîrsha.	483	24 12	22 20	23 21	25 3	26 4	t.
561 May 14 Sat.	Jyeshṭha.	484	23 58	22 18	23 48	24 8	25 38	t.
561 Nov. 7 Mon.	Mârgaśîrsha.	484	23 30	22 15	—	—	24 45	5·9
563 Mar. 25 Sun.	Chaitra.	486	18 23	16 59	—	—	19 47	7·7
563 Sept. 17 Mon.	Âśvina	486	23 40	22 19	—	—	25 1	7·1
564 Mar. 13 Thur.	Chaitra.	487	20 55	19 4	20 5	21 45	22 46	t.
564 Sept. 6 Sat.	Âśvina I, (*w. m. i.*) Âśvina.	487	15 55	14 3	15 3	16 47	17 47	t.
565 Mar. 2 Mon.	Phâlguna.	487	20 56	19 49	—	—	22 3	4·4
565 Aug. 27 Thur.	Bhâdrapada.	488	7 9	5 52	—	—	8 26	6·3
567 Jan. 11 Tues.	Mâgha.	489	3 4	1 32	—	—	4 36	9·6
567 July 7 Thur.	Śrâvaṇa I, (*w. m. i.*) Śrâvaṇa.	490	4 26	2 51	—	—	6 1	10 8
567 Dec. 31 Sat.	Pausha.	490	18 47	16 55	17 56	19 38	20 39	t.
568 June 25 Mon.	Âshâḍha.	491	6 42	4 54	5 59	7 25	8 30	t.
568 Dec. 20 Thur.	Pausha.	491	7 30	6 19	—	—	8 41	5·1
569 June 14 Fri.	Âshâḍha.	492	15 48	15 25	—	—	16 11	0·5
570 May 5 Mon.	Jyeshṭha, (*w. m. i.*) Jyeshṭha I.	493	24 23	23 11	—	—	25 35	5·2
570 Oct. 29 Wed.	Kârttika	493	18 6	17 3	—	—	19 9	3·9
571 Apr. 25 Sat.	Vaiśâkha	494	16 46	14 54	15 55	17 37	18 38	t.
571 Oct. 18 Sun.	Kârttika	494	21 48	19 57	20 58	22 38	23 39	t.
572 Apr. 14 Thur.	Vaiśâkha.	495	4 19	3 1	—	—	5 37	6·5
572 Oct. 7 Fri.	Kârttika	495	8 47	7 18	—	—	10 16	8·8
574 Feb. 21 Wed.	Phâlguna.	496	16 36	15 16	—	—	17 56	6·9
574 Aug. 18 Sat.	Bhâdrapada.	497	5 56	4 27	—	—	7 25	8·7
575 Feb. 10 Sun.	Phâlguna.	497	23 20	21 28	22 29	24 11	25 12	t.
575 Aug. 7 Wed.	Bhâdrapada I, (*w. m. i.*) Bhâdrapada. . . .	498	13 48	11 58	12 59	14 37	15 38	t.
576 Jan. 31 Fri.	Mâgha	498	12 32	11 15	—	—	13 49	6·2
576 July 26 Sun.	Śrâvaṇa.	499	15 26	14 37	—	—	16 15	2·3
577 Dec. 11 Sat.	Pausha	500	4 38	3 13	—	—	6 3	7·8
578 June 5 Sun.	Ashâḍha I	501	15 11	13 25	14 34	15 48	16 57	t.
578 Nov. 30 Wed.	Mârgaśîrsha	501	8 24	6 32	7 33	9 15	10 16	t.
579 May 26 Fri.	Jyeshṭha.	502	7 30	5 47	7 2	7 58	9 13	t.
579 Nov. 19 Sun.	Mârgaśîrsha.	502	7 30	6 14	—	—	8 46	6·1
581 Apr. 5 Sat.	Vaiśâkha I, (*w. m i.*) Chaitra II.	504	1 36	0 17	—	—	2 55	6·6
581 Sept. 28 Sun.	Âśvina.	504	7 55	6 37	—	—	9 13	6·5
582 Mar. 25 Wed.	Chaitra.	505	3 58	2 6	3 6	4 50	5 50	t.
582 Sept. 17 Thur.	Âśvina.	505	24 8	22 16	23 16	25 0	26 0	t.
583 Mar 14 Sun.	Chaitra.	506	4 15	3 1	—	—	5 29	5·6
583 Sept. 7 Tues.	Bhâdrapada II, (*w. m. i.*) Âśvina.	506	14 59	13 37	—	—	16 21	7·3
585 Jan. 21 Sun.	Mâgha.	507	11 50	10 19	—	—	13 21	9·4
585 July 17 Tues.	Śrâvaṇa.	508	10 56	9 26	—	—	12 26	9·0
586 Jan. 11 Fri.	Mâgha	508	3 36	1 44	2 45	4 27	5 28	t.
586 July 6 Sat.	Śrâvaṇa I, (*w. m. i.*) Śrâvaṇa.	509	13 32	11 42	12 44	14 20	15 22	t.
586 Dec. 31 Tues.	Pausha.	509	16 5	14 54	—	—	17 16	5.0

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A. D. Year, Month, and Day.	Hindu Month and Current Saka Year. ["*w. m. i.*" = with mean intercalations.]	Time measured from Laṅka mean sunrise, taken as 6 A. M. Greatest phase. [*i.e.* moment of full moon] h. m.	Beginning of Eclipse. h. m.	Period of total obscuration. Beginning. h. m.	Period of total obscuration. End. h. m.	End of Eclipse. h. m.	Number of twelfths eclipsed. ["*t.*" = total eclipse.]
1	2	3	4	5	6	7	8
587 June 25 Wed.	Âshâḍha 510	23 0	22 12	—	—	23 48	2·2
588 May 16 Sun.	Jyeshṭha 511	7 58	6 56	—	—	9 0	3·7
588 Nov. 9 Tues.	Mârgaśîrsha 511	2 6	1 5	—	—	3 7	3·6
589 May 5 Thur.	Jyeshṭha I, (*w. m. i.*) Vaiśakha II 512	24 14	22 24	23 25	25 3	26 4	t.
589 Oct. 29 Sat.	Karttika 512	6 0	4 9	5 10	6 50	7 51	t.
590 Apr. 25 Tues.	Vaiśâkha 513	11 25	9 58	—	—	12 52	8·2
590 Oct. 18 Wed.	Kârttika 513	17 16	15 45	—	—	18 47	9·3
592 Mar. 3 Mon.	Chaitra 515, (*w. m. i.*) Phâlguna 514	24 8	22 53	—	—	25 23	5·8
592 Aug. 28 Thur.	Bhâdrapada 515	13 36	12 13	—	—	14 59	7·5
593 Feb. 21 Sat.	Phâlguna 515	7 26	5 34	6 34	8 18	9 18	t.
593 Aug. 17 Mon.	Bhâdrapada 516	20 54	19 2	20 3	21 45	22 46	t.
594 Feb. 10 Wed.	Phâlguna 516	21 4	19 44	—	—	22 24	6·8
594 Aug. 6 Fri.	Bhâdrapada I, (*w. m. i.*) Bhâdrapada 517	22 6	21 2	—	—	23 10	4·0
595 Dec. 22 Thur.	Pausha 518	13 9	11 45	—	—	14 33	7·7
596 June 15 Fri.	Âshâḍha 519	22 31	20 48	22 3	22 59	24 14	t.
596 Dec. 10 Mon.	Pausha 519	16 34	14 42	15 43	17 25	18 26	t.
597 June 5 Wed.	Âshâḍha I 520	14 56	13 10	14 18	15 34	16 42	t.
597 Nov. 29 Fri.	Mârgaśîrsha 520	15 33	14 16	—	—	16 50	6·2
599 Apr. 16 Thur.	Vaiśâkha 522	8 44	7 34	—	—	9 54	4·9
599 Oct. 9 Fri.	Karttika 522	16 25	15 9	—	—	17 41	6·0
600 Apr. 4 Mon.	Vaiśâkha I, (*w. m. i.*) Chaitra 523	10 51	8 59	10 0	11 42	12 43	t.
600 Sept. 28 Wed.	Âśvina 523	8 30	6 38	7 39	9 21	10 22	t
601 Mar. 24 Fri.	Chaitra 524	11 23	10 3	—	—	12 43	6·9
601 Sept. 17 Sun.	Âśvina 524	22 59	21 33	—	—	24 25	8·1
603 Feb. 1 Fri.	Mâgha 525	20 28	18 58	—	—	21 58	9·1
603 July 28 Sun.	Srâvaṇa 526	17 32	16 11	—	—	18 53	7·0
604 Jan. 22 Wed.	Mâgha 526	12 16	10 24	11 25	13 7	14 8	t.
604 July 16 Thur.	Śrâvaṇa 527	20 19	18 28	19 29	21 9	22 10	t.
605 Jan. 10 Sun.	Mâgha 527	24 34	23 24	—	—	25 44	4·9
605 July 6 Tues.	Srâvaṇa I, (*w. m. i.*) Śrâvaṇa 528	6 19	5 15	—	—	7 23	4·0
606 May 27 Fri.	Jyeshṭha 529	15 28	14 43	—	—	16 13	1·9
606 Nov. 20 Sun.	Mârgaśîrsha 529	10 11	9 10	—	—	11 12	3·6
607 May 17 Wed.	Jyeshṭha 530	7 40	5 50	6 54	8 26	9 30	t.
607 Nov. 9 Thur.	Mârgaśîrsha 530	14 27	12 36	13 37	15 17	16 18	t.
608 May 5 Sun.	Jyeshṭha I, (*w. m. i.*) Vaiśâkha II 531	18 26	16 53	—	—	19 59	9·9
608 Oct. 29 Tues.	Kârttika 531	1 57	0 25	—	—	3 29	9·6
610 Mar. 15 Sun.	Chaitra 533	7 34	6 23	—	—	8 45	5·0
610 Sept. 8 Tues.	Âśvina 533	21 21	20 3	—	—	22 39	6·4
611 Mar. 4 Thur.	Chaitra 534	15 24	13 32	14 32	16 16	17 16	t.
611 Aug. 29 Sun.	Bhâdrapada 534	4 4	2 12	3 12	4 56	5 56	t.
612 Feb. 22 Tues.	Phâlguna 534	5 29	4 7	—	—	6 51	7·2
612 Aug. 17 Thur.	Bhâdrapada 535	4 54	3 41	—	—	6 7	5·4
614 Jan. 1 Tues.	Pausha 536	21 35	20 11	—	—	22 59	7·6
614 June 27 Thur.	Âshâḍha 537	5 51	4 12	5 44	5 58	7 30	t.
614 Dec. 21 Sat.	Pausha 537	24 41	22 49	23 50	25 32	26 33	t.
615 June 16 Mon.	Ashâḍha 538	22 26	20 37	21 42	23 10	24 15	t.
615 Dec. 10 Wed.	Pausha 538	23 41	22 23	—	—	24 59	6·5
616 June 5 Sat.	Âshâḍha I 539	15 10	14 52	—	—	15 28	0·3
617 Apr. 26 Tues.	Vaisâkha 540	15 37	14 39	—	—	16 35	3·3
617 Oct. 19 Wed.	Kârttika 540	24 54	23 41	—	—	26 7	5·5

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A. D. Year, Month, and Day.	Hindu Month and Current Śaka Year. ["w. m. i." = with mean intercalations.]		Time measured from Laṅka mean sunrise, taken as 6 A. M. Greatest phase. [i.e. moment of full moon]		Beginning of Eclipse.		Period of total obscuration. Beginning.		Period of total obscuration. End.		End of Eclipse.		Number of twelfths eclipsed. ["t." = total eclipse.]
			h.	m.	h.	m.	h.	m.	h.	m.	h.	m.	
1	2		3		4		5		6		7		8
618 Apr. 15 Sat.	Vaiśâkha	541	17	36	15	46	16	47	18	25	19	26	t.
618 Oct. 9 Mon.	Kârttika	541	16	55	15	3	16	4	17	46	18	47	t.
619 Apr. 4 Wed.	Vaiśâkha I, (w. m. i.) Chaitra	542	18	25	16	57	—		—		19	53	8·4
619 Sept. 29 Sat.	Âśvina	542	7	3	5	35	—		—		8	31	8·5
621 Feb. 12 Thur.	Phâlguna	543	5	1	3	33	—		—		6	29	8·6
621 Aug. 7 Fri	Bhâdrapada I, (w. m. i.) Bhâdapada	544	24	13	22	59	—		—		25	27	5·6
622 Feb. 1 Mon.	Mâgha	544	20	51	18	59	19	59	21	43	22	43	t.
622 July 28 Wed.	Śrâvaṇa	545	3	19	1	27	2	27	4	11	5	11	t.
623 Jan. 22 Sat.	Mâgha	545	8	59	7	47	—		—		10	11	5 3
623 July 17 Sun.	Śrâvaṇa	546	13	37	12	23	—		—		14	51	5·7
624 June 6 Wed.	Âshâḍha	547	22	58	22	35	—		—		23	21	0·5
624 Nov. 30 Fri.	Mârgaśîrsha	547	18	19	17	20	—		—		19	18	3·4
625 May 27 Mon.	Jyeshṭha	548	14	53	13	6	14	11	15	35	16	40	t.
625 Nov. 19 Tues.	Mârgaśîrsha	548	22	54	21	3	22	4	23	44	24	45	t.
626 May 16 Fri.	Jyeshṭha	549	25	21	23	44	—		—		26	58	11·4
626 Nov. 9 Sun.	Mârgaśîrsha	549	10	35	9	3	—		—		12	7	9·8
628 Mar. 25 Fri.	Chaitra	551	14	49	13	46	—		—		15	52	3·9
628 Sept. 19 Mon.	Âśvina	551	5	11	3	58	—		—		6	24	5·5
629 Mar. 14 Tues.	Chaitra	552	23	14	21	22	22	23	24	5	25	6	t.
629 Sept. 8 Fri.	Âśvina I, (w. m. i.) Âśvina	552	11	18	9	26	10	27	12	9	13	10	t.
630 Mar. 4 Sun.	Chaitra 553, (w. m. i.) Phâlguna 552		13	40	12	14	—		—		15	6	8·1
630 Aug. 28 Tues.	Bhâdrapada	553	11	52	10	32	—		—		13	12	6·8
632 Jan. 13 Mon.	Mâgha	554	5	54	4	32	—		—		7	16	7·2
632 July 7 Tues.	Śrâvaṇa I, (w. m. i.) Śrâvaṇa	555	13	13	11	39	—		—		14	47	10·4
633 Jan. 1 Fri.	Pausha	555	8	42	6	50	7	50	9	34	10	34	t.
633 June 27 Sun.	Âshâḍha	556	5	53	4	3	5	5	6	41	7	43	t.
633 Dec. 21 Tues.	Pausha	556	7	45	6	26	—		—		9	4	6·6
634 June 16 Thur.	Âshâḍha	557	22	33	21	49	—		—		23	17	1·8
635 May 7 Sun.	Jyeshṭha, (w. m. i.) Jyeshṭha I	558	22	29	21	47	—		—		23	11	1·6
635 Oct. 31 Tues.	Kârttika	558	9	37	8	24	—		—		10	50	5·4
636 Apr. 25 Thur.	Vaiśâkha	559	24	15	22	25	23	29	25	1	26	5	t.
636 Oct. 19 Sat.	Kârttika	559	25	30	23	39	24	40	26	20	27	21	t.
637 Apr. 14 Mon.	Vaiśâkha	560	25	22	23	49	—		—		26	55	9·9
637 Oct. 9 Thur.	Kârttika	560	15	19	13	49	—		—		16	49	9·1
639 Feb. 23 Tues.	Phâlguna	561	13	26	12	0	—		—		14	52	8·0
639 Aug. 19 Thur.	Bhâdrapada	562	7	7	6	3	—		—		8	11	4·0
640 Feb. 13 Sun.	Phâlguna	562	5	21	3	29	4	29	6	13	7	13	t.
640 Aug. 7 Mon.	Bhâdrapada I, (w. m. i.) Bhâdrapada	563	10	25	8	33	9	34	11	16	12	17	t.
641 Feb. 1 Thur.	Mâgha	563	17	14	16	0	—		—		18	28	5·7
641 July 27 Fri.	Śrâvaṇa	564	21	2	19	41	—		—		22	23	7·1
642 Dec. 12 Thur.	Pausha	565	2	32	1	32	—		—		3	32	3·5
643 June 7 Sat.	Âshâḍha I, (w. m. i.) Âshâḍha	566	22	10	20	25	21	37	22	43	23	55	t.
643 Dec. 1 Mon.	Mârgaśîrsha	566	7	27	5	36	6	37	8	17	9	18	t.
644 May 27 Thur.	Jyeshṭha	567	8	10	6	28	7	48	8	32	9	52	t.
644 Nov. 19 Fri.	Mârgaśîrsha	567	19	23	17	50	—		—		20	56	10·1
646 Apr. 5 Wed.	Vaiśâkha, (w. m. i.) Vaiśâkha I	569	21	59	21	5	—		—		22	53	2·8
646 Sept. 30 Sat.	Âśvina	569	13	13	12	3	—		—		14	23	4·8
647 Mar. 26 Mon.	Chaitra	570	7	0	5	9	6	10	7	50	8	51	t.
647 Sept. 19 Wed.	Âśvina	570	18	47	16	56	17	57	19	37	20	38	t.
648 Mar. 14 Fri.	Chaitra	571	21	49	20	19	—		—		23	19	9·1

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		Greatest phase. [i.e. moment of full moon]	Beginning of Eclipse.	Period of total obscuration.		End of Eclipse.	
				Beginning.	End.		
		h. m.	h. m.	h. m.	h. m.	h. m.	
1	2	3	4	5	6	7	8
648 Sept. 7 Sun.	Âśvina 571	18 59	17 34	—	—	20 24	7·8
650 Jan. 23 Sat.	Mâgha 572	14 10	12 49	—	—	15 31	7·0
650 July 18 Sun.	Śravaṇa 573	20 43	19 13	—	—	22 13	8·9
651 Jan. 12 Wed.	Mâgha 573	16 46	14 54	15 54	17 38	18 38	t.
651 July 8 Fri.	Śrâvaṇa I, (*w. m. i.*) Śrâvaṇa 574	13 28	11 37	12 38	14 18	15 19	t.
652 Jan. 1 Sun.	Pausha 574	15 52	14 33	—	—	17 11	6·7
652 June 27 Wed.	Âshâḍha 575	5 51	4 52	—	—	6 50	3·4
653 Nov. 10 Sun.	Mârgaśîrsha 576	18 27	17 15	—	—	19 39	5·3
654 May 7 Wed.	Jyeshṭha, (*w. m. i.*) Jyeshṭha I 577	6 47	5 0	6 5	7 29	8 34	t.
654 Oct. 31 Fri.	Kârttika 577	10 13	8 22	9 23	11 3	12 4	t.
655 Apr. 26 Sun.	Vaiśâkha 578	8 13	6 35	—	—	9 51	11·6
655 Oct. 20 Tues.	Kârttika 578	23 38	22 7	—	—	25 9	9·4
657 Mar. 5 Sun.	Chaitra 580, (*w. m. i.*) Phâlguna 579 . . .	21 43	20 21	—	—	23 5	7·2
657 Aug. 29 Tues.	Bhâdrapada 580	14 10	13 16	—	—	15 4	2·8
658 Feb. 23 Fri.	Phâlguna 580	13 42	11 50	12 50	14 34	15 34	t.
658 Aug. 18 Sat.	Bhâdrapada 581	17 43	15 52	16 53	18 33	19 34	t.
659 Feb. 13 Wed.	Phâlguna 581	1 22	0 7	—	—	2 37	5 8
659 Aug. 8 Thur.	Bhâdrapada I, (*w. m. i.*) Bhâdrapada 582	4 39	3 11	—	—	6 7	8·4
660 Dec. 22 Tues.	Pausha 583	10 45	9 45	—	—	11 45	3·5
661 June 18 Fri.	Âshâḍha 584	5 19	3 38	5 2	5 36	7 0	t.
661 Dec. 11 Sat.	Pausha 584	16 2	14 11	15 12	16 52	17 53	t.
662 June 7 Tues.	Âshâḍha I, (*w. m. i.*) Âshâḍha 585	14 55	13 9	14 19	15 31	16 41	t.
662 Dec. 1 Thur.	Mârgaśîrsha 585	4 16	2 43	—	—	5 49	10·0
664 Apr. 16 Tues.	Vaiśâkha 587	5 8	4 30	—	—	5 46	1·3
664 Oct. 10 Thur.	Kârttika 587	21 19	20 14	—	—	22 24	4·2
665 Apr. 5 Sat.	Vaiśâkha, (*w. m. i.*) Chaitra II 588	14 38	12 48	13 49	15 27	16 28	t.
665 Sept. 30 Tues.	Âśvina 588	2 22	0 32	1 33	3 11	4 12	t.
666 Mar. 26 Thur.	Chaitra 589	5 49	4 16	—	—	7 22	10·1
666 Sept. 19 Sat.	Aśvina 589	2 17	0 48	—	—	3 46	8·8
668 Feb. 3 Thur.	Mâgha 590	22 18	20 59	—	—	23 37	6·7
668 July 29 Sat.	Śrâvaṇa 591	4 21	2 57	—	—	5 45	7·6
669 Jan. 22 Mon.	Mâgha 591	24 38	22 46	23 46	25 30	26 30	t.
669 July 18 Wed.	Śrâvaṇa 592	21 5	19 13	20 13	21 57	22 57	t.
670 Jan. 11 Fri.	Mâgha 592	23 53	22 32	—	—	25 14	7·1
670 July 8 Mon.	Śrâvaṇa I, (*w. m. i*) Śrâvaṇa 593	13 10	12 1	—	—	14 19	4·7
671 Nov. 22 Sat.	Mârgaśîrsha 594	3 16	2 4	—	—	4 28	5·2
672 May 17 Mon.	Jyeshṭha 595	13 19	11 34	12 46	13 52	15 4	t.
672 Nov. 10 Wed.	Mârgaśîrsha 595	18 59	17 8	18 9	19 49	20 50	t.
673 May 6 Fri.	Jyeshṭha, (*w. m. i.*) Jyeshṭha I 596	15 3	13 21	14 39	15 27	16 45	t.
673 Oct. 31 Mon.	Kârttika 596	8 2	6 31	—	—	9 33	9·5
675 Mar. 17 Sat.	Chaitra 598	5 50	4 32	—	—	7 8	6·4
675 Sept. 9 Sun.	Âśvina 598	21 18	20 34	—	—	22 2	1·8
676 Mar. 5 Wed.	Chaitra 599, (*w. m. i.*) Phâlguna 598 . . .	21 54	20 2	21 2	22 46	23 46	t.
676 Aug. 28 Thur.	Bhâdrapada 599	23 10	23 20	24 22	25 58	27 0	t.
677 Feb. 23 Mon.	Phâlguna 599	9 21	8 2	—	—	10 40	6·6
677 Aug. 18 Tues.	Bhadrapada 600	12 21	10 49	—	—	13 53	9·8
679 Jan. 2 Sun.	Pausha 601	18 55	17 57	—	—	19 53	3·2
679 June 29 Wed.	Âshâḍha 602	12 34	10 58	—	—	14 10	11·0
679 Dec. 22 Thur.	Pausha 602	24 41	22 50	23 51	25 31	26 32	t.
680 June 17 Sun.	Âshâḍha 603	21 37	19 49	20 55	22 19	23 25	t.

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1	2	3	4	5	6	7	8
680 Dec. 11 Tues.	Pausha 603	13 11	11 37	—	—	14 45	10·2
682 Oct. 22 Wed.	Kârttika 605	5 31	4 29	—	—	6 33	3·7
683 Apr. 16 Thur.	Vaiśâkha 606	22 10	20 20	21 23	22 57	24 0	t.
683 Oct. 11 Sun.	Kârttika 606	10 2	8 12	9 14	10 50	11 52	t.
684 Apr. 5 Tues.	Vaiśâkha, (*w. m. i.*) Chaitra II........ 607	13 43	12 6	—	—	15 20	11·5
684 Sept. 29 Thur.	Âśvina 607	9 39	8 7	—	—	11 11	9·7
686 Feb. 14 Wed.	Phâlguna, ... 608	6 16	5 1	—	—	7 31	5·9
686 Aug. 9 Thur.	Bhâdrapada 609	11 58	10 41	—	—	13 15	6·3
687 Feb. 3 Sun.	Mâgha 609	8 25	6 33	7 34	9 16	10 17	t.
687 July 30 Tues.	Śrâvaṇa 610	4 44	2 52	3 52	5 36	6 36	t.
688 Jan. 23 Thur.	Mâgha 610	7 51	6 28	—	—	9 14	7·4
688 July 18 Sat.	Śrâvaṇa 611	20 32	19 15	—	—	21 49	6·3
689 Dec. 2 Thur.	Mârgaśirsha 612	12 9	10 57	—	—	13 21	5·2
690 May 28 Sat.	Jyeshṭha 613	19 41	18 1	19 31	19 51	21 21	t.
690 Nov. 22 Tues.	Mârgaśîrsha 613	3 51	2 0	3 1	4 41	5 42	t.
691 May 17 Wed.	Jyeshṭha 614	21 48	20 2	21 13	22 23	23 34	t.
691 Nov. 11 Sat.	Mârgaśîrsha 614	16 36	15 4	—	—	18 8	9·6
693 Mar. 27 Thur.	Chaitra 616	13 53	12 39	—	—	15 7	5·6
693 Sept. 20 Sat.	Âśvina 616	4 42	4 11	—	—	5 13	0·9
694 Mar. 17 Tues.	Chaitra 617	5 53	4 1	5 2	6 44	7 45	t.
694 Sept. 9 Wed.	Âśvina 617	8 48	6 58	8 1	9 35	10 38	t.
695 Mar. 6 Sat.	Chaitra I 618, (*w. m. i.*) Phâlguna 617.	17 11	15 48	—	—	18 34	7·4
695 Aug. 29 Sun.	Bhadrapada 618	20 13	18 37	—	—	21 49	10·9
697 Jan. 13 Sat.	Mâgha 619	3 4	2 8	—	—	4 0	3·0
697 July 9 Mon.	Srâvaṇa I, (*w. m. i.*) Śrâvaṇa 620	19 49	18 18	—	—	21 20	9·2
698 Jan. 2 Wed.	Pausha 620	9 13	7 22	8 23	10 3	11 4	t.
698 June 29 Sat.	Âshâḍha 621	4 21	2 31	3 33	5 9	6 11	t.
698 Dec. 22 Sun.	Pausha 621	22 2	20 28	—	—	23 36	10·3
699 June 18 Wed.	Âshâḍha 622	6 23	5 48	—	—	6 58	1·1
700 Nov. 1 Mon.	Kârttika 623	13 46	12 48	—	—	14 44	3·3
701 Apr. 27 Wed.	Vaiśâkha 624	5 39	3 51	4 57	6 21	7 27	t.
701 Oct. 21 Fri.	Kârttika 624	17 52	16 2	17 5	18 39	19 42	t.
702 Apr. 16 Sun.	Vaiśâkha 625	21 34	19 53	21 15	21 53	23 15	t.
702 Oct. 10 Tues.	Kârttika 625	17 20	15 46	—	—	18 54	10·3
704 Feb. 25 Mon.	Phâlguna 626	14 3	12 52	—	—	15 14	5·1
704 Aug. 19 Tues.	Bhâdrapada 627	19 45	18 33	—	—	20 57	5 2
705 Feb. 13 Fri.	Phâlguna 627	16 0	14 9	15 10	16 50	17 51	t.
705 Aug. 9 Sun.	Bhâdrapada 628	12 27	10 35	11 36	13 18	14 19	t.
706 Feb. 2 Tues.	Mâgha 628	15 40	14 15	—	—	17 5	7·9
706 July 30 Fri.	Śrâvaṇa 629	3 58	2 34	—	—	5 22	7·6
707 Dec. 13 Tues.	Pausha 630	21 8	19 57	—	—	22 19	5·1
708 June 8 Fri.	Âshâḍha 631	2 7	0 33	—	—	3 41	10·3
708 Dec. 2 Sun.	Mârgaśîrsha 631	12 41	10 50	11 51	13 31	14 32	t.
709 May 28 Tues.	Jyeshṭha 632	4 32	2 43	3 48	5 16	6 21	t.
709 Nov. 21 Thur.	Mârgaśîrsha 632	25 9	23 37	—	—	26 41	9 8
710 May 17 Sat.	Jyeshṭha 633	13 43	13 20	—	—	14 6	0·5
711 Apr. 7 Tues.	Vaiśâkha, (*w. m. i.*) Vaiśâkha I........ 634	21 49	20 43	—	—	22 55	4·3
712 Mar. 27 Sun.	Chaitra 635	13 44	11 53	12 54	14 34	15 35	t.
712 Sept. 19 Mon.	Âśvina 635	16 33	14 44	15 49	17 17	18 22	t.
713 Mar. 16 Thur.	Chaitra 636	24 46	23 19	—	—	26 13	8·2

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1	2	3	4	5	6	7	8
713 Sept. 9 Sat.	Âśvina.... 636	4 11	2 32	—	—	5 50	11·9
715 Jan. 24 Thur.	Mâgha 637	11 3	10 7	—	—	11 59	3·0
715 July 21 Sun.	Śrâvaṇa........................ 638	2 59	1 35	—	—	4 23	7·6
716 Jan. 13 Mon.	Mâgha 638	17 45	15 55	16 56	18 34	19 35	t.
716 July 9 Thur.	Śrâvaṇa I, (*w. m. i.*) Śrâvaṇa......... 639	11 4	9 13	10 14	11 54	12 55	t.
717 Jan. 2 Sat.	Pausha 639	6 51	5 17	—	—	8 25	10·4
717 June 28 Mon.	Âshâḍha 640	12 46	11 50	—	—	13 42	3·0
718 Nov. 12 Sat.	Mârgaśîrsha 641	22 11	21 17	—	—	23 5	2·8
719 May 8 Mon.	Jyeshṭha........................ 642	13 4	11 18	12 28	13 40	14 50	t.
719 Nov. 1 Wed.	Kârttika 642	25 45	23 55	24 59	26 31	27 35	t.
720 Apr. 27 Sat.	Vaiśâkha........................ 643	5 14	3 30	4 42	5 46	6 58	t.
720 Oct. 20 Sun.	Kârttika 643	25 1	23 26	—	—	26 36	10·8
722 Mar. 7 Sat.	Chaitra, (*w. m. i.*) Chaitra I.......... 645	21 45	20 38	—	—	22 52	4·4
722 Aug. 31 Mon.	Bhâdrapada 645	3 40	2 35	—	—	4 45	4·2
723 Feb. 24 Wed.	Phâlguna........................ 645	23 30	21 39	22 40	24 20	25 21	t.
723 Aug. 20 Fri.	Bhâdrapada 646	20 21	18 30	19 31	21 11	22 12	t.
724 Feb. 13 Sun.	Phâlguna........................ 646	23 22	21 54	—	—	24 50	8·6
724 Aug. 9 Wed.	Bhâdrapada I, (*w. m. i.*) Bhâdrapada.... 647	11 31	10 0	—	—	13 2	9·2
725 Dec. 24 Mon.	Pausha 648	6 0	4 48	—	—	7 12	5·3
726 June 19 Wed.	Âshâḍha 649	8 29	7 1	—	—	9 57	8·4
726 Dec. 13 Fri.	Pausha........................ 649	21 35	19 44	20 45	22 25	23 26	t.
727 June 8 Sun.	Ashaḍha 650	11 16	9 26	10 27	12 5	13 6	t.
727 Dec. 3 Wed.	Mârgaśîrsha 650	9 44	8 12	—	—	11 16	9·7
728 May 27 Thur.	Jyeshṭha........................ 651	20 54	20 3	—	—	21 45	2·5
729 Apr. 18 Mon.	Vaiśâkha........................ 652	5 32	4 36	—	—	6 28	3·0
730 Apr. 7 Fri.	Vaiśâkha, (*w. m. i.*) Vaiśâkha I......... 653	21 31	19 41	20 43	22 19	23 21	t.
730 Sept. 30 Sat.	Âśvina........................ 653	24 28	22 41	23 46	25 10	26 15	t.
731 Mar. 28 Wed.	Chaitra........................ 654	8 15	6 44	—	—	9 46	9·4
731 Sept. 20 Thur.	Âśvina........................ 654	12 19	10 38	11 59	12 39	14 0	t.
733 Feb. 3 Tues.	Phâlguna, (*w. m. i.*) Mâgha II......... 655	19 0	18 8	—	—	19 52	2·6
733 July 31 Fri.	Śrâvaṇa........................ 656	10 19	9 3	—	—	11 35	6·0
734 Jan. 24 Sun.	Mâgha 656	2 13	0 23	1 24	3 2	4 3	t.
734 July 20 Tues.	Śrâvaṇa 657	17 46	15 54	16 54	18 38	19 38	t.
735 Jan. 13 Thur.	Mâgha........................ 657	15 44	14 10	—	—	17 18	10·4
735 July 9 Sat.	Śrâvaṇa I, (*w. m. i.*) Śrâvaṇa......... 658	19 15	18 5	—	—	20 25	4·9
736 Nov. 23 Fri.	Mârgaśîrsha 659	6 36	5 43	—	—	7 29	2·7
737 May 18 Sat.	Jyeshṭha........................ 660	20 26	18 43	19 59	20 53	22 9	t.
737 Nov. 12 Tues.	Mârgaśîrsha........................ 660	9 46	7 57	9 1	10 31	11 35	t.
738 May 8 Thur.	Jyeshṭha........................ 661	12 50	11 3	12 11	13 29	14 37	t.
738 Nov. 1 Sat.	Kârttika 661	8 54	7 17	—	—	10 31	11·4
740 Mar. 18 Fri.	Chaitra........................ 663	5 11	4 13	—	—	6 9	3·2
740 Sept. 10 Sat.	Âśvina........................ 663	11 46	10 48	—	—	12 44	3·2
741 Mar. 7 Tues.	Chaitra 664, (*w. m. i.*) Phâlguna II 663.	6 49	4 59	6 1	7 37	8 39	t.
741 Aug. 31 Thur.	Bhâdrapada 664	4 18	2 28	3 29	5 7	6 8	t.
742 Feb. 24 Sat.	Phâlguna........................ 664	7 1	5 30	—	—	8 32	9·5
742 Aug. 20 Mon.	Bhâdrapada........................ 665	19 6	17 32	—	—	20 40	10·2
744 Jan. 4 Sat.	Pausha 666	14 51	13 40	—	—	16 2	5·1
744 June 29 Mon.	Âshâḍha 667	14 54	13 36	—	—	16 12	6·5
744 Dec. 24 Thur.	Pausha 667	6 23	4 32	5 33	7 13	8 14	t.
745 June 18 Fri	Âshâḍha 668	17 59	16 8	17 9	18 49	19 50	t.

TABLE E.

A. D. Year, Month, and Day.	Hindu Month and Current Saka Year. ["*w.m.i.*" = with mean intercalations.]		Time measured from Lañka mean sunrise, taken as 6 A. M. Greatest phase. [*i. e.* moment of fullmoon] h. m.	Beginning of Eclipse. h. m.	Period of total obscuration. Beginning. h. m.	Period of total obscuration. End. h. m.	End of Eclipse. h. m.	Number of twelfths eclipsed. ["*t.*" = total eclipse.]
1	2		3	4	5	6	7	8
745 Dec. 13 Mon.	Pausha	668	18 15	16 43	—	—	19 47	9·7
746 June 8 Wed.	Âshâḍha	669	4 10	3 4	—	—	5 16	4·3
747 Apr. 29 Sat.	Vaiśâkha	670	13 11	12 28	—	—	13 54	1·7
748 Apr. 18 Thur.	Vaiśâkha	671	5 8	3 19	4 23	5 53	6 57	t.
748 Oct. 11 Fri.	Kârttika	671	8 36	6 49	7 57	9 15	10 23	t.
749 Apr. 7 Mon.	Vaiśâkha, (*w. m. i.*) Vaiśâkha I	672	15 34	13 58	—	—	17 10	10·9
749 Sept. 30 Tues.	Âśvina	672	20 39	18 56	20 14	21 4	22 22	t.
751 Feb. 15 Mon.	Phâlguna	673	2 49	2 2	—	—	3 36	2·1
751 Aug. 11 Wed.	Bhâdrapada	674	17 40	16 32	—	—	18 48	4·6
752 Feb. 4 Fri.	Phâlguna, (*w. m. i.*) Mâgha	674	10 33	8 43	9 44	11 22	12 23	t.
752 July 30 Sun.	Śrâvaṇa	675	24 37	22 45	23 46	25 28	26 29	t.
753 Jan. 23 Tues.	Mâgha	675	24 22	22 46	—	—	25 58	10·9
753 July 20 Fri.	Śrâvaṇa	676	1 43	0 24	—	—	3 2	6·6
754 Dec. 4 Wed.	Mârgaśîrsha	677	15 0	14 8	—	—	15 52	2·6
755 May 30 Fri.	Jyeshṭha	678	3 46	2 7	—	—	5 25	11·9
755 Nov. 23 Sun.	Mârgaśîrsha	678	17 47	15 58	17 2	18 32	19 36	t.
756 May 18 Tues.	Jyeshṭha	679	20 21	18 32	19 37	21 5	22 10	t.
756 Nov. 11 Thur.	Mârgaśîrsha	679	16 51	15 13	—	—	18 29	11·6
757 May 8 Sun.	Jyeshṭha	680	13 0	12 39	—	—	13 21	0·4
758 Mar. 29 Wed.	Chaitra	681	12 26	11 39	—	—	13 13	2·1
758 Sept. 21 Thur.	Aśvina	681	19 58	19 7	—	—	20 49	2·5
759 Mar. 18 Sun.	Chaitra	682	13 57	12 7	13 11	14 43	15 47	t.
759 Sept. 11 Tues.	Âśvina	682	12 26	10 36	11 39	13 13	14 16	t.
760 Mar. 6 Thur.	Chaitra 683, (*w. m. i.*) Phâlguna II 682.		14 30	12 56	—	—	16 4	10·4
760 Aug. 31 Sun.	Bhâdrapada	683	2 47	1 11	—	—	4 23	11·1
762 Jan. 14 Thur.	Mâgha	684	23 40	22 30	—	—	24 50	4·9
762 July 10 Sat.	Śrâvaṇa	685	21 21	20 14	—	—	22 28	4·5
763 Jan. 4 Tues.	Pausha	685	15 12	13 22	14 23	16 1	17 2	t.
763 June 29 Wed.	Âshâḍha	686	24 45	22 53	23 53	25 37	26 37	t.
763 Dec. 25 Sun.	Pausha	686	2 48	1 16	—	—	4 20	9·7
764 June 18 Mon.	Ashâḍha	687	11 19	10 4	—	—	12 34	5·8
765 May 9 Thur.	Jyeshṭha	688	20 48	20 30	—	—	21 6	0·3
766 Apr. 29 Tues.	Vaiśâkha	689	12 30	10 43	11 51	13 9	14 17	t.
766 Oct. 22 Wed.	Kârttika	689	16 50	15 4	16 12	17 28	18 36	t.
767 Apr. 18 Sat.	Vaiśâkha	690	22 42	21 3	22 42	22 42	24 21	t.
767 Oct. 12 Mon.	Kârttika	690	5 4	3 20	4 34	5 34	6 48	t.
769 Feb. 25 Sat.	Phâlguna	691	10 33	9 55	—	—	11 11	1·3
769 Aug. 22 Tues.	Bhâdrapada	692	1 11	0 13	—	—	2 9	3·3
770 Feb. 14 Wed.	Phâlguna	692	18 47	16 57	17 59	19 35	20 37	t.
770 Aug. 11 Sat.	Bhâdrapada	693	7 32	5 42	6 43	8 21	9 22	t.
771 Feb. 4 Mon	Phâlguna, (*w. m. i.*) Mâgha	693	9 1	7 24	—	—	10 38	11·3
771 July 31 Wed.	Śrâvaṇa	694	8 22	6 54	—	—	9 50	8·4
772 Dec. 14 Mon.	Pausha	695	23 30	22 39	—	—	24 21	2·5
773 June 9 Wed.	Âshâḍha	696	11 7	9 33	—	—	12 41	10·3
773 Dec. 4 Sat.	Mârgaśîrsha	696	1 53	0 4	1 9	2 37	3 42	t.
774 May 30 Mon.	Jyeshṭha	697	3 50	2 0	3 1	4 39	5 40	t.
774 Nov. 22 Tues.	Mârgaśîrsha	697	24 54	23 16	—	—	26 32	11·7
775 May 19 Fri.	Jyeshtha	698	20 24	19 40	—	—	21 8	1·8
776 Apr. 8 Mon.	Vaiśâkha	699	19 36	19 8	—	—	20 4	0·7
776 Oct. 2 Wed.	Âśvina	699	4 21	3 37	—	—	5 5	1·8

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1	2	3	4	5	6	7	8
777 Mar. 28 Fri.	Chaitra ... 700	20 58	19 10	20 15	21 41	22 46	t.
777 Sept. 21 Sun.	Âśvina ... 700	20 36	18 47	19 51	21 21	22 25	t.
778 Mar. 17 Tues.	Chaitra ... 701	21 49	20 12	—	—	23 26	11·5
778 Sept. 11 Fri.	Âśvina ... 701	10 36	8 57	10 29	10 43	12 15	t.
780 Jan. 26 Wed.	Mâgha ... 702	8 27	7 18	—	—	9 36	4·7
780 July 21 Fri.	Śrâvaṇa ... 703	3 53	2 59	—	—	4 47	2·8
781 Jan. 14 Sun.	Mâgha ... 703	23 55	22 5	23 6	24 44	25 45	t.
781 July 10 Tues.	Śrâvaṇa ... 704	7 39	5 48	6 49	8 29	9 30	t.
782 Jan. 4 Fri.	Pausha ... 704	11 15	9 42	—	—	12 48	9·9
782 June 29 Sat.	Âshâḍha ... 705	18 38	17 15	—	—	20 1	7·5
784 May 9 Sun.	Jyeshṭha ... 707	19 56	18 11	19 23	20 29	21 41	t.
784 Nov. 1 Mon.	Kârttika ... 707	25 10	23 24	24 34	25 46	26 56	t.
785 Apr. 29 Fri.	Vaiśâkha ... 708	5 42	3 59	5 15	6 9	7 25	t.
785 Oct. 22 Sat.	Kârttika ... 708	13 38	11 53	13 5	14 11	15 23	t.
787 Mar. 8 Thur.	Chaitra, (*w. m. i.*) Chaitra I ... 710	18 8	17 40	—	—	18 36	0·7
787 Sept. 2 Sun.	Bhâdrapada ... 710	8 46	7 59	—	—	9 33	2·1
788 Feb. 26 Tues.	Phâlguna ... 710	2 58	1 8	2 11	3 45	4 48	t.
788 Aug. 21 Thur.	Bhâdrapada ... 711	14 33	12 43	13 47	15 19	16 23	t.
789 Feb. 14 Sat.	Phâlguna ... 711	17 31	15 52	—	—	19 10	11·9
789 Aug. 10 Mon.	Bhâdrapada ... 712	15 4	13 31	—	—	16 37	10·0
790 Dec. 26 Sun.	Pausha ... 713	7 52	7 3	—	—	8 41	2·3
791 June 20 Mon.	Âshâḍha ... 714	18 25	16 57	—	—	19 53	8·6
791 Dec. 15 Thur.	Pausha ... 714	10 1	8 13	9 18	10 44	11 49	t.
792 June 9 Sat.	Âshâḍha ... 715	11 23	9 32	10 33	12 13	13 14	t.
792 Dec. 3 Mon.	Mârgaśîrsha ... 715	9 0	7 22	—	—	10 38	11·8
793 May 30 Thur.	Jyeshṭha ... 716	3 43	2 43	—	—	4 43	3·5
794 Oct. 13 Mon.	Kârttika ... 717	12 52	12 13	—	—	13 31	1·4
795 Apr. 9 Thur.	Vaiśâkha ... 718	3 49	2 3	3 13	4 25	5 35	t.
795 Oct 3 Sat.	Âśvina ... 718	4 54	3 6	4 12	5 36	6 42	t.
796 Mar. 28 Mon.	Chaitra ... 719	5 2	3 21	4 43	5 21	6 43	t.
796 Sept. 21 Wed.	Âśvina ... 719	18 33	16 52	18 14	18 52	20 14	t.
798 Feb. 5 Mon.	Phâlguna, (*w. m. i.*) Phâlguna I ... 720	17 4	15 58	—	—	18 10	4·3
798 Aug. 1 Wed.	Śrâvaṇa ... 721	10 39	10 0	—	—	11 18	1·4
799 Jan. 26 Sat.	Mâgha ... 721	8 33	6 43	7 44	9 22	10 23	t.
799 July 21 Sun.	Śrâvaṇa ... 722	14 38	12 48	13 50	15 26	16 28	t.
800 Jan. 15 Wed.	Mâgha ... 722	19 41	18 8	—	—	21 14	10·1
800 July 10 Fri.	Śrâvaṇa ... 723	1 59	0 28	—	—	3 30	9·4
802 May 21 Sat.	Jyeshṭha ... 725	3 16	1 36	3 0	3 32	4 56	t.
802 Nov. 13 Sun.	Mârgaśîrsha ... 725	9 41	7 55	9 5	10 17	11 27	t.
803 May 10 Wed.	Jyeshṭha ... 726	12 38	10 52	12 2	13 14	14 24	t.
803 Nov. 2 Thur.	Kârttika ... 726	22 16	20 31	21 42	22 50	24 1	t.
805 Sept. 12 Fri.	Âśvina ... 728	16 28	15 53	—	—	17 3	1·1
806 Mar. 8 Sun.	Chaitra, (*w. m. i.*) Chaitra I ... 729	10 59	9 10	10 14	11 44	12 48	t.
806 Sept. 1 Tues.	Bhâdrapada ... 729	21 37	19 49	20 55	22 19	23 25	t.
807 Feb. 26 Fri.	Phâlguna ... 729	1 52	0 12	1 40	2 4	3 32	t.
807 Aug. 21 Sat.	Bhâdrapada ... 730	21 56	20 19	—	—	23 33	11·4
809 Jan. 5 Fri.	Pausha, (*w. m. i.*) Pausha II ... 731	16 16	15 27	—	—	17 5	2·3
809 July 1 Sun.	Âshâḍha ... 732	1 50	0 30	—	—	3 10	6·9
809 Dec. 25 Tues.	Pausha ... 732	18 2	16 14	17 19	18 45	19 50	t.
810 June 20 Thur.	Âshâḍha ... 733	18 48	16 56	17 56	19 40	20 40	t.

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1	2		3	4	5	6	7	8
810 Dec. 14 Sat.	Pausha	733	17 9	15 29	16 59	17 19	18 49	t.
811 June 10 Tues.	Âshâḍha	734	11 2	9 51	—	—	12 13	5·0
812 Oct. 23 Sat.	Kârttika	735	21 29	20 54	—	—	22 4	1·1
813 Apr. 19 Tues.	Vaiśâkha	736	10 35	8 52	10 9	11 1	12 18	t.
813 Oct. 13 Thur.	Kârttika	736	13 26	11 39	12 46	14 6	15 13	t.
814 Apr. 8 Sat.	Vaiśâkha	737	12 8	10 24	11 37	12 39	13 52	t.
814 Oct. 3 Tues.	Âśvina	737	2 38	0 55	2 12	3 4	4 21	t.
816 Feb. 17 Sun.	Phâlguna	738	1 34	0 31	—	—	2 37	3·9
817 Feb. 5 Thur.	Phâlguna, (*w. m. i.*) Mâgha II	739	17 7	15 17	16 19	17 55	18 57	t.
817 July 31 Fri.	Śrâvaṇa	739	21 47	19 58	21 2	22 32	23 36	t.
818 Jan. 26 Tues.	Mâgha	740	4 1	2 27	—	—	5 35	10·3
818 July 21 Wed.	Śrâvaṇa	741	9 24	7 48	—	—	11 0	10·9
820 May 31 Thur.	Jyeshtha	743	10 26	8 51	—	—	12 1	10·7
820 Nov. 23 Fri.	Mârgaśîrsha	743	18 14	16 28	17 38	18 50	20 0	t.
821 May 20 Mon.	Jyeshṭha	744	19 24	17 35	18 40	20 8	21 13	t.
821 Nov. 13 Wed.	Mârgaśîrsha	744	7 4	5 19	6 30	7 38	8 49	t.
822 Nov. 2 Sun.	Kârttika	745	22 47	22 29	—	—	23 5	0·3
823 Sept. 24 Thur.	Âśvina	746	0 17	0 6	—	—	0 28	0·1
824 Mar. 18 Fri.	Chaitra	747	18 54	17 7	18 12	19 36	20 41	t.
824 Sept. 12 Mon.	Âśvina	747	4 53	3 7	4 16	5 30	6 39	t.
825 Mar. 8 Wed.	Chaitra, (*w. m. i.*) Chaitra I	748	10 8	8 26	9 44	10 32	11 50	t.
825 Sept. 1 Fri.	Bhâdrapada	748	4 55	3 14	4 38	5 12	6 36	t.
827 Jan. 16 Wed.	Mâgha	749	24 30	23 45	—	—	25 15	1·9
827 July 12 Fri.	Śrâvaṇa	750	9 19	8 6	—	—	10 32	5·5
828 Jan. 6 Mon.	Pausha	750	2 3	0 15	1 21	2 45	3 51	t.
828 July 1 Wed.	Âshâḍha	751	2 20	0 28	1 28	3 12	4 12	t.
828 Dec. 24 Thur.	Pausha	751	25 19	23 39	25 9	25 29	26 59	t.
829 June 20 Sun.	Âshâḍha	752	18 18	16 59	—	—	19 37	6·6
830 Nov. 4 Fri.	Kârttika	753	6 13	5 45	—	—	6 41	0·7
831 Apr. 30 Sun.	Vaiśâkha	754	17 9	15 31	—	—	18 47	11·8
831 Oct. 24 Tues.	Kârttika	754	21 57	20 11	21 19	22 35	23 43	t.
832 Apr. 18 Thur.	Vaiśâkha	755	19 10	17 23	18 31	19 49	20 57	t.
832 Oct. 13 Sun.	Kârttika	755	10 47	9 3	10 17	11 17	12 31	t.
833 Apr. 8 Tues.	Vaiśâkha	756	3 40	3 29	—	—	3 51	0·1
834 Feb. 27 Fri.	Phâlguna	756	9 55	8 58	—	—	10 52	3·1
835 Feb. 16 Tues.	Phâlguna	757	25 30	23 40	24 43	26 17	27 20	t.
835 Aug. 12 Thur.	Bhâdrapada	758	5 3	3 16	4 23	5 43	6 50	t.
836 Feb. 6 Sun.	Phâlguna, (*w. m. i.*) Mâgha II	758	12 8	10 34	—	—	13 42	10·5
836 July 31 Mon.	Śrâvaṇa	759	16 57	15 17	16 45	17 9	18 37	t.
838 June 11 Tues.	Ashâḍha	761	17 36	16 6	—	—	19 6	9·0
838 Dec. 5 Thur.	Mârgaśîrsha	761	2 53	1 7	2 18	3 28	4 39	t.
839 June 1 Sun.	Jyeshṭha	762	2 5	0 15	1 16	2 54	3 55	t.
839 Nov. 24 Mon.	Mârgaśîrsha	762	15 54	14 8	15 18	16 30	17 40	t.
840 May 20 Thur.	Jyeshṭha	763	4 4	3 25	—	—	4 43	1·4
840 Nov. 13 Sat.	Mârgaśîrsha	763	7 36	7 13	—	—	7 59	0·5
842 Mar. 30 Thur.	Chaitra	765	2 40	0 54	2 3	3 17	4 26	t.
842 Sept. 23 Sat.	Aśvina	765	12 18	10 33	11 45	12 51	14 3	t.
843 Mar. 19 Mon.	Chaitra	766	18 17	16 33	17 46	18 48	20 1	t.
843 Sept. 12 Wed.	Âśvina	766	12 6	10 23	11 38	12 34	13 49	t.
845 Jan. 27 Tues.	Mâgha	767	8 38	7 58	—	—	9 18	1·5

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1	2		3	4	5	6	7	8
845 July 22 Wed.	Śrâvaṇa	768	16 49	15 44	—	—	17 54	4·1
846 Jan. 16 Sat.	Mâgha	768	10 0	8 13	9 18	10 42	11 47	t.
846 July 12 Mon.	Śrâvana	769	9 52	8 1	9 2	10 42	11 43	t.
847 Jan. 5 Wed.	Pausha	769	9 26	7 46	9 12	9 40	11 6	t.
847 July 2 Sat.	Âshâḍha	770	1 34	0 7	—	—	3 1	8·2
848 Nov. 14 Wed.	Mârgaśîrsha	771	15 1	14 35	—	—	15 27	0·6
849 May 10 Fri.	Jyeshṭha	772	23 42	22 9	—	—	25 15	10·1
849 Nov. 4 Mon.	Kârttika	772	6 42	4 56	6 6	7 18	8 28	t.
850 Apr. 30 Wed.	Vaiśâkha	773	2 0	0 11	1 15	2 45	3 49	t.
850 Oct. 24 Fri.	Kârttika	773	19 1	17 17	18 29	19 33	20 45	t.
851 Apr. 19 Sun.	Vaiśâkha	774	11 11	10 33	—	—	11 49	1·3
852 Mar. 9 Wed.	Chaitra	775	18 11	17 22	—	—	19 0	2·3
853 Feb. 27 Mon.	Phâlguna	775	9 42	7 53	8 57	10 27	11 31	t.
853 Aug. 22 Tues.	Bhâdrapada	776	12 23	10 38	11 49	12 57	14 8	t.
854 Feb. 16 Fri.	Phâlguna	776	20 9	18 33	—	—	21 45	11·1
854 Aug. 11 Sat.	Bhâdrapada	777	24 38	22 55	24 10	25 6	26 21	t.
856 June 21 Sun.	Âshâḍha	779	24 43	23 21	—	—	26 5	7·2
856 Dec. 15 Tues.	Pausha	779	11 28	9 42	10 52	12 4	13 14	t.
857 June 11 Fri.	Âshâḍha	780	8 44	6 52	7 53	9 35	10 36	t.
857 Dec. 4 Sat.	Mârgaśîrsha	780	24 46	23 0	24 10	25 22	26 32	t.
858 May 31 Tues.	Jyeshṭha	781	10 29	9 31	—	—	11 27	3·3
858 Nov. 24 Thur.	Mârgaśîrsha	781	16 27	16 6	—	—	16 48	0·4
860 Apr. 9 Tues.	Vaiśâkha	783	10 25	8 41	9 54	10 56	12 9	t.
860 Oct. 3 Thur.	Âśvina	783	19 50	18 7	19 24	20 16	21 33	t.
861 Mar. 30 Sun.	Chaitra	784	2 18	0 32	1 41	2 55	4 4	t.
861 Sept. 22 Mon.	Âśvina	784	19 27	17 42	18 52	20 2	21 12	t.
863 Feb. 7 Sun.	Phâlguna, (*w. m. i.*) Phâlguna I.	785	16 38	16 7	—	—	17 9	0·9
863 Aug. 2 Mon.	Śrâvaṇa	786	24 28	23 35	—	—	25 21	2·7
864 Jan. 27 Thur.	Mâgha	786	17 53	16 6	17 13	18 33	19 40	t.
864 July 22 Sat.	Śrâvaṇa	787	17 28	15 38	16 39	18 17	19 18	t.
865 Jan. 15 Mon.	Mâgha	787	17 28	15 47	17 9	17 47	19 9	t.
865 July 12 Thur.	Śrâvaṇa	788	8 47	7 14	—	—	10 20	10·0
866 Nov. 25 Mon.	Mârgaśîrsha	789	23 54	23 26	—	—	24 22	0·7
867 May 22 Thur.	Jyeshṭha	790	6 6	4 40	—	—	7 32	8·0
867 Nov. 15 Sat.	Mârgaśîrsha	790	15 25	13 39	14 49	16 1	17 11	t.
868 May 10 Mon.	Jyeshṭha	791	8 52	7 2	8 3	9 41	10 42	t.
868 Nov. 4 Thur.	Kârttika	791	3 22	1 37	2 48	3 56	5 7	t.
869 Apr. 29 Fri.	Vaiśâkha	792	18 32	17 37	—	—	19 27	2·9
870 Mar. 21 Tues.	Chaitra	793	2 17	1 37	—	—	2 57	1·5
871 Mar. 10 Sat.	Chaitra	794	17 50	16 2	17 8	18 32	19 38	t.
871 Sept. 2 Sun.	Bhâdrapada	794	19 57	18 14	19 30	20 24	21 40	t.
872 Feb. 28 Thur.	Phâlguna	794	4 3	2 25	—	—	5 41	11·8
872 Aug. 22 Fri.	Bhâdrapada	795	8 24	6 38	7 49	8 59	10 10	t.
874 July 3 Sat.	Âshâḍha	797	7 51	6 38	—	—	9 4	5·4
874 Dec. 26 Sun.	Pausha	797	20 9	18 23	19 33	20 45	21 55	t.
875 June 22 Wed.	Âshâḍha	798	15 22	13 30	14 30	16 14	17 14	t.
875 Dec. 16 Fri.	Pausha	798	9 40	7 54	9 4	10 16	11 26	t.
876 June 10 Sun.	Âshaḍha	799	16 51	15 39	—	—	18 3	5·2
876 Dec. 5 Wed.	Mârgaśîrsha	799	1 19	0 58	—	—	1 40	0·4
878 Apr. 20 Sun.	Vaiśâkha	801	17 54	16 13	17 34	18 14	19 35	t.

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1	2	3	4	5	6	7	8
878 Oct. 15 Wed.	Kârttika 801	3 29	1 48	3 9	3 49	5 10	t.
879 Apr. 10 Fri.	Vaiśâkha 802	10 6	8 18	9 24	10 48	11 54	t.
879 Oct. 4 Sun.	Âśvina 802	2 57	1 11	2 19	3 35	4 43	t.
880 Mar. 30 Wed.	Chaitra 803	2 28	2 17	—	—	2 39	0·1
880 Sept. 22 Thur.	Âśvina 803	6 14	5 51	—	—	6 37	0·5
881 Feb. 18 Sat.	Phâlguna 803	0 27	0 9	—	—	0 45	0·3
881 Aug. 13 Sun.	Bhâdrapada 804	8 13	7 34	—	—	8 52	1·4
882 Feb. 6 Tues.	Phâlguna, (*w. m. i.*) Phâlguna I. 804	25 31	23 45	24 54	26 8	27 17	t.
882 Aug. 2 Thur.	Śrâvaṇa 805	25 6	23 17	24 21	25 51	26 55	t.
883 Jan. 26 Sat.	Mâgha 805	25 26	23 44	25 2	25 50	27 8	t.
883 July 23 Tues.	Śrâvaṇa 806	16 9	14 32	—	—	17 46	11·2
884 Dec. 6 Sun.	Mârgaśîrsha, (*w. m. i.*) Mârgaśîrsha II. 807	8 44	8 21	—	—	9 7	0·5
885 June 1 Tues.	Jyeshṭha 808	12 33	11 15	—	—	13 51	6·4
885 Nov. 25 Thur.	Mârgaśîrsha 808	24 12	22 27	23 37	24 47	25 57	t.
886 May 21 Sat.	Jyeshṭha 809	15 46	13 54	14 55	16 37	17 38	t.
886 Nov. 15 Tues.	Mârgaśîrsha 809	11 47	10 2	11 13	12 21	13 32	t.
887 May 11 Thur.	Jyeshṭha 810	1 56	0 48	—	—	3 4	4·6
888 Mar. 31 Sun.	Chaitra 811	10 16	9 53	—	—	10 39	0·5
889 Mar. 20 Thur.	Chaitra 812	25 45	23 59	25 7	26 23	27 31	t.
889 Sept. 13 Sat.	Âśvina 812	3 41	2 0	3 22	4 0	5 22	t.
890 Mar. 10 Tues.	Chaitra 813	11 43	10 2	11 26	12 0	13 24	t.
890 Sept. 2 Wed.	Bhâdrapada 813	16 19	14 32	15 39	16 59	18 6	t.
891 Aug. 23 Mon.	Bhâdrapada 814	8 46	8 16	—	—	9 16	0·8
892 July 13 Thur.	Śrâvaṇa 815	14 58	13 55	—	—	16 1	3·9
893 Jan. 6 Sat.	Mâgha, (*w. m. i.*) Pausha II. 815	4 48	3 2	4 12	5 24	6 34	t.
893 July 2 Mon.	Âshâḍha 816	22 1	20 10	21 11	22 51	23 52	t.
893 Dec. 26 Wed.	Pausha 816	18 33	16 47	17 57	19 9	20 19	t.
894 June 21 Fri.	Âshaḍha 817	23 14	21 52	—	—	24 36	7·2
894 Dec. 16 Mon.	Pausha 817	10 11	9 48	—	—	10 34	0·5
896 Apr. 30 Fri.	Vaiśâkha 819	25 26	23 48	—	—	27 4	11·6
896 Oct. 25 Mon.	Kârttika 819	11 13	9 33	10 59	11 27	12 53	t.
897 Apr. 20 Wed.	Vaiśâkha 820	17 51	16 2	17 6	18 36	19 40	t.
897 Oct. 14 Fri.	Kârttika 820	10 35	8 48	9 54	11 16	12 22	t.
898 Apr. 10 Mon.	Vaiśâkha 821	10 16	9 41	—	—	10 51	1·1
898 Oct. 3 Tues.	Âśvina 821	14 9	13 31	—	—	14 47	1·3
899 Aug. 24 Fri.	Bhâdrapada 822	16 4	15 41	—	—	16 27	0·5
900 Feb. 18 Mon.	Phâlguna 822	9 7	7 22	8 33	9 41	10 52	t.
900 Aug. 13 Wed.	Bhâdrapada 823	8 51	7 4	8 10	9 32	10 38	t.
901 Feb. 6 Fri.	Phâlguna, (*w. m. i.*) Phâlguna I. 823	9 19	7 36	8 52	9 46	11 2	t.
901 Aug. 2 Sun.	Śrâvaṇa 824	23 31	21 50	23 14	23 48	25 12	t.
902 Dec. 17 Fri.	Pausha 825	17 45	17 22	—	—	18 8	0·5
903 June 12 Sun.	Âshâḍha 826	19 0	17 53	—	—	20 7	4·5
903 Dec. 7 Wed.	Mârgaśîrsha 826	9 1	7 15	8 25	9 37	10 47	t.
904 May 31 Thur.	Jyeshṭha 827	22 33	20 41	21 41	23 25	24 25	t.
904 Nov. 25 Sun.	Mârgaśîrsha 827	20 17	18 32	19 43	20 51	22 2	t.
905 May 21 Tues.	Jyeshṭha 828	9 13	7 57	—	—	10 29	6·0
907 Apr. 1 Wed.	Chaitra 830	9 32	7 47	8 58	10 6	11 17	t.
907 Sept. 24 Thur.	Âśvina 830	11 32	9 53	—	—	13 11	11·9
908 Mar. 20 Sun.	Chaitra 831	19 11	17 28	18 44	19 38	20 54	t.
908 Sept. 12 Mon.	Âśvina 831	24 23	22 34	23 39	25 7	26 12	t.

TABLE E.

A.D. Year, Month, and Day.	Hindu Month and Current Śaka Year. ["*w. m. i.*" = with mean intercalations.]		Time measured from Laṅka mean sunrise, taken as 6 A. M. — Greatest phase. [*i.e.* moment of fullmoon] h. m.	Beginning of Eclipse. h. m.	Period of total obscuration. Beginning. h. m.	Period of total obscuration. End. h. m.	End of Eclipse. h. m.	Number of twelfths eclipsed. ["*t.*" = total eclipse.]
1	2		3	4	5	6	7	8
909 Sept. 2 Sat.	Bhâdrapada	832	16 46	16 4	—	—	17 28	1·6
910 July 24 Tues.	Śrâvaṇa	833	22 7	21 19	—	—	22 55	2·2
911 Jan. 17 Thur.	Mâgha	833	13 22	11 37	12 47	13 57	15 7	t.
911 July 14 Sun.	Śrâvaṇa	834	4 38	2 48	3 50	5 26	6 28	t.
912 Jan. 7 Tues.	Mâgha, (*w. m. i*) Pausha II	834	3 22	1 36	2 46	3 58	5 8	t.
912 July 2 Thur.	Âshâḍha	835	5 38	4 8	—	—	7 8	8·9
912 Dec. 26 Sat.	Pausha	835	19 4	18 41	—	—	19 27	0·5
914 May 12 Thur.	Jyeshṭha	837	8 57	7 24	—	—	10 30	10·1
914 Nov. 5 Sat.	Kârttika	837	19 9	17 29	18 59	19 19	20 49	t.
915 May 1 Mon.	Vaiśâkha	838	25 37	23 47	24 48	26 26	27 27	t.
915 Oct. 25 Wed.	Kârttika	838	18 21	16 33	17 38	19 4	20 9	t.
916 Apr. 20 Sat.	Vaiśâkha	839	17 55	17 5	—	—	18 45	2·4
916 Oct. 13 Sun.	Kârttika	839	22 12	21 28	—	—	22 56	1·8
918 Feb. 28 Sat.	Phâlguna	840	16 34	14 51	16 6	17 2	18 17	t.
918 Aug. 24 Mon.	Bhâdrapada	841	16 42	14 56	16 6	17 18	18 28	t.
919 Feb. 17 Wed.	Phâlguna	841	17 6	15 22	16 34	17 38	18 50	t.
919 Aug. 14 Sat.	Bhâdrapada	842	6 58	5 14	6 27	7 29	8 42	t.
920 Dec. 28 Thur.	Pausha	843	2 37	2 14	—	—	3 0	0·5
921 June 23 Sat.	Âshâḍha	844	1 25	0 33	—	—	2 17	2·6
921 Dec. 17 Mon.	Pausha	844	17 54	16 9	17 19	18 29	19 39	t.
922 June 12 Wed.	Âshâḍha	845	5 25	3 34	4 35	6 15	7 16	t.
922 Dec. 7 Sat.	Mârgaśîrsha	845	4 47	3 2	4 13	5 21	6 32	t.
923 June 1 Sun.	Jyeshṭha	846	16 29	15 4	—	—	17 54	7·9
925 Apr. 11 Mon.	Vaiśâkha	848	17 10	15 28	16 47	17 33	18 52	t.
925 Oct. 4 Tues.	Âśvina	848	19 36	17 59	—	—	21 13	11·3
926 Apr. 1 Sat.	Chaitra	849	2 31	0 46	1 56	3 6	4 16	t.
926 Sept. 24 Sun.	Âśvina	849	8 36	6 46	7 50	9 22	10 26	t.
927 Sept. 14 Fri.	Âśvina	850	0 53	0 2	—	—	1 44	2·5
928 Aug. 4 Mon.	Śrâvaṇa	851	5 22	4 59	—	—	5 45	0·5
929 Jan. 27 Tues.	Mâgha	851	21 52	20 7	21 19	22 25	23 37	t.
929 July 24 Fri.	Śrâvaṇa	852	11 19	9 31	10 37	12 1	13 7	t.
930 Jan. 17 Sun.	Mâgha	852	12 11	10 25	11 34	12 48	13 57	t.
930 July 13 Tues.	Śrâvaṇa	853	12 8	10 33	—	—	13 43	10·8
931 Jan. 7 Fri.	Mâgha	853	3 53	3 32	—	—	4 14	0·4
932 May 22 Tues.	Jyeshṭha	855	16 20	14 52	—	—	17 48	8·5
932 Nov. 16 Fri.	Mârgaśîrsha	855	3 6	1 28	—	—	4 44	11·7
933 May 12 Sun.	Jyeshṭha	856	9 10	7 18	8 19	10 1	11 2	t.
933 Nov. 5 Tues.	Kârttika	856	2 23	0 34	1 39	3 7	4 12	t.
934 May 2 Fri.	Vaiśâkha	857	1 22	0 20	—	—	2 24	3·8
934 Oct. 25 Sat.	Kârttika	857	6 24	5 36	—	—	7 12	2·2
936 Mar. 10 Thur.	Chaitra	859	23 48	22 7	23 29	24 7	25 29	t.
936 Sept. 3 Sat.	Bhâdrapada	859	24 36	22 52	24 6	25 6	26 20	t.
937 Feb. 27 Mon.	Phâlguna	859	24 45	22 59	24 9	25 21	26 31	t.
937 Aug. 24 Thur.	Bhâdrapada	860	14 31	12 45	13 55	15 7	16 17	t.
938 Feb. 17 Sat.	Phâlguna	860	7 58	7 47	—	—	8 9	0·1
939 Jan. 8 Tues.	Mâgha, (*w. m. i.*) Mâgha I	861	11 25	11 2	—	—	11 48	0·5
939 July 4 Thur.	Âshâḍha	862	7 57	7 27	—	—	8 27	0·8
939 Dec. 29 Sun.	Pausha	862	2 40	0 55	2 7	3 13	4 25	t.
940 June 22 Mon.	Âshâḍha	863	12 15	10 25	11 27	13 3	14 5	t.
940 Dec. 17 Thur.	Pausha	863	13 19	11 34	12 44	13 54	15 4	t.

TABLE E.

A. D. Year, Month, and Day.	Hindu Month and Current Śaka Year. ["*w. m. i.*" = with mean intercalations.]		Time measured from Laṅka mean sunrise, taken as 5 A. M. Greatest phase. [*i.e.* moment of fullmoon] h. m.	Beginning of Eclipse. h. m.	Period of total obscuration. Beginning. h. m.	Period of total obscuration. End. h. m.	End of Eclipse. h. m.	Number of twelfths eclipsed. ["*t.*" = total eclipse.]
1	2		3	4	5	6	7	8
941 June 11 Fri.	Âshâḍha	864	23 47	22 15	—	—	25 19	9·6
943 Apr. 22 Sat.	Vaiśâkha	866	24 43	23 4	—	—	26 22	11·9
943 Oct. 16 Mon.	Kârttika	866	3 49	2 14	—	—	5 24	10·8
944 Apr. 11 Thur.	Vaiśâkha	867	9 43	7 56	9 2	10 24	11 30	t.
944 Oct. 4 Fri.	Âśvina	867	16 55	15 5	16 8	17 42	18 45	t.
945 Sept. 24 Wed.	Âśvina	868	9 9	8 11	—	—	10 7	3·2
947 Feb. 8 Mon.	Phâlguna	869	6 15	4 31	5 44	6 46	7 59	t.
947 Aug. 4 Wed.	Srâvaṇa	870	18 6	16 20	17 30	18 42	19 52	t.
948 Jan. 28 Fri.	Mâgha	870	20 57	19 10	20 18	21 36	22 44	t.
948 July 23 Sun.	Śrâvaṇa	871	18 41	17 0	18 24	18 58	20 22	t.
949 Jan. 17 Wed.	Mâgha	871	12 36	12 13	—	—	12 59	0·5
950 June 2 Sun.	Jyeshṭha	873	23 46	22 25	—	—	25 7	7·0
950 Nov. 27 Wed.	Mârgaśîrsha	873	11 7	9 30	—	—	12 44	11·5
951 May 23 Fri.	Jyeshṭha	874	16 43	14 51	15 51	17 35	18 35	t.
951 Nov. 16 Sun.	Mârgaśîrsha	874	10 21	8 32	9 36	11 6	12 10	t.
952 May 12 Wed.	Jyeshṭha	875	8 49	7 37	—	—	10 1	5·2
952 Nov. 4 Thur.	Kârttika	875	14 43	13 51	—	—	15 35	2·6
954 Mar. 22 Wed.	Chaitra	877	6 55	5 17	—	—	8 33	11·7
954 Sept. 15 Fri.	Aśvina	877	8 46	7 4	8 24	9 8	10 28	t.
955 Mar. 11 Sun.	Chaitra	878	8 11	6 24	7 30	8 52	9 58	t.
955 Sept. 4 Tues.	Bhâdrapada	878	22 11	20 24	21 30	22 52	23 58	t.
956 Feb. 28 Thur.	Phâlguna	878	16 1	15 30	—	—	16 32	0·9
957 Jan. 18 Sun.	Mâgha	879	20 15	20 0	—	—	20 30	0·2
958 Jan. 8 Fri.	Mâgha, (*w. m. i.*) Mâgha I.	880	11 24	9 39	10 51	11 57	13 9	t.
958 July 3 Sat.	Âshâḍha	881	19 9	17 20	18 26	19 52	20 58	t.
958 Dec. 28 Tues.	Pausha	881	21 44	19 59	21 9	22 19	23 29	t.
959 June 23 Thur.	Âshaḍha	882	7 6	5 29	—	—	8 43	11·2
961 May 3 Fri.	Vaiśâkha	884	8 3	6 29	—	—	9 37	10·3
961 Oct. 26 Sat.	Kârttika	884	12 7	10 33	—	—	13 41	10·4
962 Apr. 22 Tues.	Vaiśâkha	885	16 45	14 56	16 0	17 30	18 34	t.
962 Oct. 15 Wed.	Kârttika	885	25 24	23 34	24 35	26 13	27 14	t.
963 Apr. 11 Sat.	Vaiśâkha	886	18 40	18 19	—	—	19 1	0·4
963 Oct. 5 Mon.	Âśvina	886	17 28	16 25	—	—	18 31	3·9
965 Feb. 18 Sat.	Phâlguna	887	14 31	12 48	14 3	14 59	16 14	t.
965 Aug. 14 Mon.	Bhâdrapada	888	24 58	23 15	24 33	25 23	26 41	t.
966 Feb. 8 Thur.	Phâlguna	888	5 29	3 42	4 48	6 10	7 16	t.
966 Aug. 3 Fri.	Śrâvaṇa	889	25 18	23 33	24 45	25 51	27 3	t.
967 Jan. 28 Mon.	Mâgha	889	21 16	20 46	—	—	21 46	0·8
968 June 13 Sat.	Âshâḍha	891	7 4	5 52	—	—	8 16	5·3
968 Dec. 7 Mon.	Mârgaśîrsha, (*w. m. i.*) Mârgaśîrsha II.	891	19 10	17 33	—	—	20 47	11·3
969 June 2 Wed.	Jyeshṭha	892	24 12	22 20	23 20	25 4	26 4	t.
969 Nov. 26 Fri.	Mârgaśîrsha	892	18 25	16 36	17 40	19 10	20 14	t.
970 May 23 Mon.	Jyeshṭha	893	16 7	14 47	—	—	17 27	6·8
970 Nov. 15 Tues.	Mârgaśîrsha	893	23 7	22 11	—	—	24 3	3·0
972 Apr. 1 Mon.	Chaitra	895	13 54	12 20	—	—	15 28	10·5
972 Sept. 25 Wed.	Âśvina	895	16 55	15 16	16 55	16 55	18 34	t.
973 Mar. 21 Fri.	Chaitra	896	15 37	13 48	14 52	16 22	17 26	t.
973 Sept. 15 Mon.	Âśvina	896	5 55	4 6	5 10	6 40	7 44	t.
974 Mar. 10 Tues.	Chaitra	897	23 59	23 16	—	—	24 42	1·7
976 Jan. 19 Wed.	Mâgha	898	20 2	18 18	19 30	20 34	21 46	t.

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1	2	3	4	5	6	7	8
976 July 14 Fri.	Śrâvaṇa 899	2 7	0 21	1 30	2 44	3 53	t.
977 Jan. 8 Mon.	Mâgha, (w. m. i.) Mâgha I 899	6 8	4 23	5 33	6 43	7 53	t.
977 July 3 Tues.	Âshâḍha 900	14 27	12 45	14 5	14 49	16 9	t.
979 May 14 Wed.	Jyeshṭha. 902	15 22	13 53	—	—	16 51	8·8
979 Nov. 6 Thur.	Kârttika 902	20 36	19 2	—	—	22 10	10·3
980 May 2 Sun.	Vaiśâkha 903	23 37	21 47	22 48	24 26	25 27	t.
980 Oct. 26 Tues.	Kârttika 903	10 1	8 11	9 12	10 50	11 51	t.
981 Apr. 22 Fri.	Vaiśâkha 904	1 23	0 36	—	—	2 10	2·1
981 Oct. 16 Sun.	Kârttika 904	1 57	0 51	—	—	3 3	4·3
983 Mar. 1 Thur.	Phâlguna 905	22 40	20 58	22 17	23 3	24 22	t.
983 Aug. 26 Sun.	Bhâdrapada 906	7 54	6 16	—	—	9 32	11·8
984 Feb. 19 Tues.	Phâlguna 906	13 58	12 10	13 15	14 41	15 46	t.
984 Aug. 14 Thur.	Bhâdrapada 907	8 6	6 19	7 26	8 46	9 53	t.
985 Feb. 8 Sun.	Phâlguna 907	5 49	5 14	—	—	6 24	1·1
985 Aug. 3 Mon.	Śrâvaṇa 908	11 30	11 15	—	—	11 45	0·2
986 June 24 Thur.	Ashâḍha 909	14 31	13 29	—	—	15 33	3·7
986 Dec. 19 Sun.	Pausha 909	3 14	1 38	—	—	4 50	11·1
987 June 14 Tues.	Âshâḍha 910	7 40	5 49	6 50	8 30	9 31	t.
987 Dec. 8 Thur.	Mârgaśirsha, (w. m. i.) Mârgaśirsha II . . . 910	2 39	0 49	1 53	3 25	4 29	t.
988 June 2 Sat.	Jyeshṭha 911	23 24	21 56	—	—	24 52	8·5
988 Nov. 26 Mon.	Mârgaśirsha 911	7 40	6 43	—	—	8 37	3·1
990 Apr. 12 Sat.	Vaiśâkha 913	20 46	19 16	—	—	22 16	9·1
990 Oct. 6 Mon.	Aśvina 913	25 16	23 39	—	—	26 53	11·5
991 Apr. 1 Wed.	Chaitra 914	22 54	21 4	22 6	23 42	24 44	t.
991 Sept 26 Sat.	Âśvina 914	13 48	11 58	13 2	14 34	15 38	t.
992 Mar. 21 Mon.	Chaitra 915	7 49	6 55	—	—	8 43	2·8
992 Sept. 14 Wed.	Âśvina 915	19 27	18 59	—	—	19 55	0·7
994 Jan. 30 Tues.	Mâgha 916	4 37	2 53	4 7	5 7	6 21	t.
994 July 25 Wed.	Śrâvaṇa 917	9 15	7 32	8 48	9 42	10 58	t.
995 Jan. 19 Sat.	Mâgha 917	14 24	12 38	13 48	15 0	16 10	t.
995 July 14 Sun.	Śrâvaṇa 918	21 52	20 7	21 18	22 26	23 37	t.
997 May 24 Mon.	Jyeshtha 920	22 34	21 13	—	—	23 55	7·0
997 Nov. 17 Wed.	Mârgaśirsha 920	5 9	3 35	—	—	6 43	10·2
998 May 14 Sat.	Jyeshtha 921	6 26	4 34	5 35	7 17	8 18	t.
998 Nov. 6 Sun.	Kârttika 921	18 46	16 56	17 57	19 35	20 36	t.
999 May 3 Wed.	Vaiśâkha 922	7 56	6 54	—	—	8 58	3·7
999 Oct. 27 Fri.	Kârttika 922	10 36	9 28	—	—	11 44	4·6
1001 Mar. 12 Wed.	Chaitra 924	6 45	5 5	6 33	6 57	8 25	t.
1001 Sept. 5 Fri.	Bhâdrapada 924	15 1	13 26	—	—	16 36	10·6
1002 Mar. 1 Sun.	Phâlguna 924	22 20	20 31	21 35	23 5	24 9	t.
1002 Aug. 25 Tues.	Bhâdrapada 925	15 1	13 12	14 16	15 46	16 50	t.
1003 Feb. 19 Fri.	Phâlguna 925	14 15	13 32	—	—	14 58	1·7
1003 Aug. 14 Sat.	Bhâdrapada 926	18 41	17 57	—	—	19 25	1·8
1004 July 4 Tues.	Âshâḍha 927	21 56	21 10	—	—	22 42	2·0
1004 Dec. 29 Fri.	Pausha 927	11 18	9 43	—	—	12 53	10·8
1005 June 24 Sun.	Âshâḍha 928	15 10	13 20	14 22	15 58	17 0	t.
1005 Dec. 18 Tues.	Pausha 928	10 52	9 2	10 6	11 38	12 42	t.
1006 June 14 Fri.	Âshâḍha 929	6 37	5 4	—	—	8 10	10·1
1006 Dec. 7 Sat.	Mârgaśirsha, (w. m. i.) Mârgaśirsha II . . 929	16 11	15 13	—	—	17 9	3·2
1008 Apr. 23 Fri.	Vaiśâkha 931	3 28	2 5	—	—	4 51	7·5

TABLE E.

A. D. Year, Month, and Day.	Hindu Month and Current Śaka Year. [" *w.m.i.*" = with mean intercalations.]	Time measured from Lańka mean sunrise, taken as 5 A. M. Greatest phase. [*i.e.* moment of fullmoon] h. m.	Beginning of Eclipse. h. m.	Period of total obscuration. Beginning. h. m.	Period of total obscuration. End. h. m.	End of Eclipse. h. m.	Number of twelfths eclipsed. ["*t.*" = total eclipse.]
1	2	3	4	5	6	7	8
1008 Oct. 17 Sun.	Kârttika 931	9 47	8 11	—	—	11 23	11·0
1009 Apr. 12 Tues.	Vaiśâkha 932	6 7	4 16	5 17	6 57	7 58	t.
1009 Oct. 6 Thur.	Âśvina 932	21 46	19 56	20 58	22 34	23 36	t.
1010 Apr. 1 Sat.	Chaitra 933	15 35	14 31	—	—	16 39	4·0
1010 Sept. 26 Tues.	Âśvina 933	2 54	2 12	—	—	3 36	1·6
1012 Feb. 10 Sun.	Phâlguna 934	13 3	11 20	12 36	13 30	14 46	t.
1012 Aug. 4 Mon.	Śrâvaṇa 935	16 31	14 52	16 24	16 38	18 10	t.
1013 Jan. 29 Thur.	Mâgha 935	22 38	20 52	22 1	23 15	24 24	t.
1013 July 25 Sat.	Śrâvaṇa 936	5 23	3 36	4 42	6 4	7 10	t.
1014 July 14 Wed.	Śrâvaṇa 937	22 12	21 51	—	—	22 33	0.4
1015 June 5 Sun.	Jyeshṭha 938	5 39	4 27	—	—	6 51	5·2
1015 Nov. 28 Mon.	Mârgaśîrsha 938	13 46	12 13	—	—	15 19	10·0
1016 May 24 Thur.	Jyeshṭha 939	13 8	11 16	12 16	14 0	15 0	t.
1016 Nov. 17 Sat.	Mârgaśîrsha 939	3 31	1 40	2 41	4 21	5 22	t.
1017 May 13 Mon.	Jyeshṭha 940	14 29	13 16	—	—	15 42	5·4
1017 Nov. 6 Wed.	Kârttika 940	19 22	18 12	—	—	20 32	4·9
1019 Mar. 23 Mon.	Chaitra 942	14 45	13 8	—	—	16 22	11·3
1019 Sept. 16 Wed.	Âśvina 942	22 16	20 45	—	—	23 47	9·4
1020 Mar. 12 Sat.	Chaitra 943	6 35	4 45	5 48	7 22	8 25	t.
1020 Sept. 4 Sun.	Bhâdrapada 943	22 7	20 17	21 19	22 55	23 57	t.
1021 Mar. 1 Wed.	Phâlguna 943	22 32	21 43	—	—	23 21	2·3
1021 Aug. 25 Fri.	Bhâdrapada 944	2 4	1 8	—	—	3 0	3·0
1022 July 16 Mon.	Śrâvaṇa 945	5 28	4 58	—	—	5 58	0·8
1023 Jan. 9 Wed.	Mâgha 945	19 16	17 41	—	—	20 51	10·7
1023 July 5 Fri.	Âshâḍha 946	22 38	20 49	21 54	23 22	24 27	t.
1023 Dec. 29 Sun.	Pausha 946	19 5	17 15	18 18	19 52	20 55	t.
1024 June 24 Wed.	Âshâḍha 947	13 49	12 11	—	—	15 27	11·7
1024 Dec. 17 Thur.	Pausha 947	24 49	23 50	—	—	25 48	3·4
1026 May 4 Wed.	Vaiśâkha 949	10 5	8 50	—	—	11 20	5·8
1026 Oct. 28 Fri.	Kârttika 949	18 18	16 44	—	—	19 52	10·5
1027 Apr. 23 Sun.	Vaiśâkha 950	13 11	11 19	12 20	14 2	15 3	t.
1027 Oct. 18 Wed.	Kârttika 950	5 56	4 6	5 7	6 45	7 46	t.
1028 Apr. 11 Thur.	Vaiśâkha 951	23 10	21 58	—	—	24 22	5.3
1028 Oct. 6 Sun.	Âśvina 951	10 30	9 42	—	—	11 18	2·2
1030 Feb. 20 Fri.	Phâlguna 952	21 21	19 39	20 59	21 43	23 3	t.
1030 Aug. 15 Sat.	Bhâdrapada 953	23 51	22 15	—	—	25 27	10·9
1031 Feb. 10 Wed.	Phâlguna 953	6 38	4 51	5 59	7 17	8 25	t.
1031 Aug. 5 Thur.	Śrâvaṇa 954	12 59	11 9	12 13	13 45	14 49	t.
1032 July 25 Tues.	Śrâvaṇa 955	5 48	5 3	—	—	6 33	1·9
1033 June 15 Fri.	Âshâḍha 956	12 44	11 46	—	—	13 42	3·3
1033 Dec. 8 Sat.	Pausha, (*w. m. i.*) Pausha I 956	22 28	20 54	—	—	24 2	10·2
1034 June 4 Tues.	Jyeshṭha 957	19 43	17 52	18 53	20 33	21 34	t.
1034 Nov. 28 Thur.	Mârgaśîrsha 957	12 23	10 32	11 33	13 13	14 14	t.
1035 May 24 Sat.	Jyeshṭha 958	20 54	19 31	—	—	22 17	7·4
1035 Nov. 18 Tues.	Mârgaśîrsha 958	4 4	2 53	—	—	5 15	5·1
1037 Apr. 2 Sat.	Chaitra 960	22 29	20 55	—	—	24 3	10·4
1037 Sept. 27 Tues.	Âśvina 960	5 34	4 6	—	—	7 2	8·6
1038 Mar. 23 Thur.	Chaitra 961	14 41	12 51	13 52	15 30	16 31	t.
1038 Sept. 16 Sat.	Âśvina 961	5 20	3 29	4 30	6 10	7 11	t.
1039 Mar. 13 Tues.	Chaitra 962	6 36	5 41	—	—	7 31	2.9

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			Greatest phase. [*i.e.* moment of fullmoon]		Beginning of Eclipse.		Period of total obscuration. Beginning.		Period of total obscuration. End.		End of Eclipse.		
			h.	m.	h.	m.	h.	m.	h.	m.	h.	m.	
1	2		3		4		5		6		7		8
1039 Sept. 5 Wed.	Bhâdrapada	962	9	30	8	26	—		—		10	34	4·0
1041 Jan. 20 Tues.	Mâgha	963	3	11	1	37	—		—		4	45	10·5
1041 July 16 Thur.	Śrâvaṇa	964	6	9	4	23	5	31	6	47	7	55	t.
1042 Jan. 9 Sat.	Mâgha	964	3	13	1	23	2	27	3	59	5	3	t.
1042 July 5 Mon.	Âshâḍha	965	20	59	19	17	20	35	21	23	22	41	t.
1042 Dec. 29 Wed.	Pausha	965	9	26	8	26	—		—		10	26	3·5
1044 May 14 Mon.	Jyeshṭha	967	16	38	15	33	—		—		17	43	4·2
1044 Nov. 8 Thur.	Kârttika, (*w.m.i.*) Karttika II	967	2	54	1	20	—		—		4	28	10·2
1045 May 3 Fri.	Vaiśâkha	968	20	7	18	15	19	15	20	59	21	59	t.
1045 Oct. 28 Mon.	Kârttika	968	14	5	12	15	13	16	14	54	15	55	t.
1046 Apr. 23 Wed.	Vaiśâkha	969	6	44	5	25	—		—		8	3	6·6
1046 Oct. 17 Fri.	Kârttika	969	18	13	17	20	—		—		19	6	2·7
1048 Mar. 3 Thur.	Phâlguna	970	5	32	3	52	5	18	5	46	7	12	t.
1048 Aug. 26 Fri.	Bhâdrapada	971	7	23	5	51	—		—		8	55	9·6
1049 Feb. 20 Mon.	Phâlguna	971	14	35	12	48	13	53	15	17	16	22	t.
1049 Aug. 15 Tues.	Bhâdrapada	972	20	43	18	53	19	54	21	32	22	33	t.
1050 Aug. 5 Sun.	Śrâvaṇa	973	13	28	12	30	—		—		14	26	3·2
1051 June 26 Wed.	Âshâḍha	974	19	45	19	2	—		—		20	28	1·7
1051 Dec. 20 Fri.	Pausha	974	7	11	5	38	—		—		8	44	10·0
1052 June 15 Mon.	Âshâḍha	975	2	16	0	26	1	29	3	3	4	6	t.
1052 Dec. 8 Tues.	Mârgaśîrsha, (*w.m.i.*) Pausha I	975	21	16	19	25	20	26	22	6	23	7	t.
1053 June 4 Fri.	Jyeshṭha	976	3	21	1	50	—		—		4	52	9·4
1053 Nov. 28 Sun.	Mârgaśîrsha	976	12	51	11	40	—		—		14	2	5·0
1055 Apr. 14 Tues.	Vaiśâkha	978	6	15	4	44	—		—		7	46	9·3
1055 Oct. 8 Sun.	Âśvina	978	13	6	11	42	—		—		14	30	7·7
1056 Apr. 2 Tues.	Chaitra	979	22	41	20	50	21	51	23	31	24	32	t.
1056 Sept. 26 Thur.	Âśvina	979	12	44	10	53	11	54	13	34	14	35	t.
1057 Mar. 23 Sun.	Chaitra	980	14	31	13	29	—		—		15	33	3·8
1057 Sept. 15 Mon.	Âśvina	980	17	12	16	1	—		—		18	23	5·0
1059 Jan. 31 Sun.	Mâgha	981	10	57	9	24	—		—		12	30	9·9
1059 July 27 Tues.	Śrâvaṇa	982	13	45	12	1	13	15	14	15	15	29	t.
1060 Jan. 20 Thur.	Mâgha	982	11	18	9	28	10	30	12	6	13	8	t.
1060 July 16 Sun.	Śrâvaṇa	983	4	10	2	24	3	35	4	45	5	56	t.
1061 Jan. 8 Mon.	Mâgha	983	18	0	16	58	—		—		19	2	3·7
1062 May 25 Sat.	Jyeshṭha	985	23	7	22	18	—		—		23	56	2·3
1062 Nov. 19 Tues.	Mârgaśîrsha	985	11	41	10	8	—		—		13	14	10·1
1063 May 15 Thur.	Jyeshṭha	986	3	5	1	14	2	15	3	55	4	56	t.
1063 Nov. 8 Sat.	Kârttika, (*w.m.i.*) Kârttika II	986	22	24	20	34	21	35	23	13	24	14	t.
1064 May 3 Mon.	Vaiśâkha	987	14	10	12	43	—		—		15	37	8·3
1064 Oct. 28 Thur.	Kârttika	987	1	59	1	2	—		—		2	56	3·1
1066 Mar. 14 Tues.	Chaitra	989	13	31	11	54	—		—		15	8	11·4
1066 Sept. 6 Wed.	Bhâdrapada	989	15	2	13	34	—		—		16	30	8·6
1067 Mar. 3 Sat.	Phâlguna	989	22	19	20	30	21	35	23	3	24	8	t.
1067 Aug. 27 Mon.	Bhâdrapada	990	4	34	2	43	3	44	5	24	6	25	t.
1068 Feb. 20 Wed.	Phâlguna	990	24	0	23	32	—		—		24	28	0·7
1068 Aug. 15 Fri.	Bhâdrapada	991	21	18	20	11	—		—		22	25	4·4
1069 Dec. 30 Wed.	Pausha	992	15	52	14	19	—		—		17	25	10·1
1070 June 26 Sat.	Âshâḍha	993	8	48	7	1	8	7	9	29	10	35	t.
1070 Dec. 20 Mon.	Pausha	993	6	9	4	18	5	19	6	59	8	0	t.
1071 June 15 Wed.	Âshâḍha	994	9	44	8	7	—		—		11	21	11·2

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1	2		3	4	5	6	7	8
1071 Dec. 9 Fri.	Mârgaśîrsha, (*w. m. i.*) Pausha I	994	21 42	20 31	—	—	22 53	5·1
1073 Apr. 24 Wed.	Vaiśâkha	996	13 51	12 26	—	—	15 16	7·9
1073 Oct. 18 Fri.	Kârttika	996	20 46	19 25	—	—	22 7	7·0
1074 Apr. 14 Mon.	Vaiśâkha	997	6 29	4 37	5 38	7 20	8 21	t.
1074 Oct. 7 Tues.	Âśvina	997	20 21	18 29	19 30	21 12	22 13	t.
1075 Apr. 3 Fri.	Chaitra	998	22 21	21 11	—	—	23 31	4·8
1075 Sept. 26 Sat.	Âśvina	998	25 2	23 46	—	—	26 18	6·0
1077 Feb. 10 Fri.	Phâlguna	999	18 41	17 9	—	—	20 13	9·6
1077 Aug. 6 Sun.	Śrâvaṇa	1000	21 21	19 41	21 9	21 33	23 1	t.
1078 Jan. 30 Tues.	Mâgha	1000	19 21	17 31	18 32	20 10	21 11	t.
1078 July 27 Fri.	Śrâvaṇa	1001	11 25	9 37	10 43	12 7	13 13	t.
1079 Jan. 20 Sun.	Mâgha	1001	2 29	1 25	—	—	3 33	4·0
1080 June 5 Fri.	Jyeshṭha	1003	5 36	5 15	—	—	5 57	0·4
1080 Nov. 29 Sun	Mârgaśîrsha	1003	20 22	18 50	—	—	21 54	9·8
1081 May 25 Tues.	Jyeshṭha	1004	10 3	8 13	9 15	10 51	11 53	t.
1081 Nov. 19 Fri.	Mârgaśîrsha	1004	6 46	4 55	5 56	7 36	8 37	t.
1082 May 14 Sat.	Jyeshṭha	1005	21 33	20 1	—	—	23 5	9·7
1082 Nov. 8 Tues.	Kârttika, (*w. m. i.*) Kârttika II	1005	9 55	8 57	—	—	10 53	3·3
1084 Mar. 24 Sun.	Chaitra	1007	21 23	19 49	—	—	22 57	10·4
1084 Sept. 16 Mon.	Âśvina	1007	22 53	21 28	—	—	24 18	7·8
1085 Mar. 14 Fri.	Chaitra	1008	5 52	4 2	5 5	6 39	7 42	t.
1085 Sept. 6 Sat.	Bhâdrapada	1008	12 31	10 39	11 40	13 22	14 23	t.
1086 Mar. 3 Tues.	Phâlguna	1008	7 23	6 43	—	—	8 3	1·5
1086 Aug. 27 Thur.	Bhâdrapada	1009	5 12	3 59	—	—	6 25	5·5
1088 Jan. 10 Mon.	Mâgha	1010	24 34	23 1	—	—	26 7	10·0
1088 July 6 Thur.	Âshâḍha	1011	15 19	13 35	14 48	15 50	17 3	t.
1088 Dec. 30 Sat.	Pausha	1011	15 3	13 12	14 13	15 53	16 54	t.
1089 June 25 Mon.	Âshâḍha	1012	16 3	14 20	15 38	16 28	17 46	t.
1089 Dec. 20 Thur.	Pausha	1012	6 35	5 24	—	—	7 46	5·0
1091 May 5 Mon.	Vaiśâkha	1014	21 26	20 8	—	—	22 44	6·4
1091 Oct. 30 Thur.	Kârttika	1014	4 30	3 12	—	—	5 48	6·5
1092 Apr. 24 Sat.	Vaiśâkha	1015	14 15	12 23	13 23	15 7	16 7	t.
1092 Oct. 18 Mon.	Kârttika	1015	4 7	2 15	3 15	4 59	5 59	t.
1093 Apr. 14 Thur.	Vaiśâkha	1016	6 2	4 47	—	—	7 17	5·9
1093 Oct. 7 Fri.	Âsvina	1016	9 1	7 42	—	—	10 20	6·7
1095 Feb. 22 Thur.	Phâlguna	1017	2 11	0 41	—	—	3 41	8·9
1095 Aug. 18 Sat.	Bhâdrapada	1018	5 2	3 26	—	—	6 38	11·0
1096 Feb. 11 Mon.	Phâlguna	1018	3 15	1 25	2 26	4 4	5 5	t.
1096 Aug. 6 Wed.	Śrâvaṇa	1019	18 42	16 52	17 56	19 28	20 32	t.
1097 Jan. 30 Fri.	Mâgha	1019	10 54	9 48	—	—	12 0	4·3
1098 Dec. 11 Sat.	Pausha	1021	5 8	3 35	—	—	6 41	9·9
1099 June 5 Sun.	Jyeshtha	1022	16 54	15 6	16 12	17 36	18 42	t.
1099 Nov. 30 Wed.	Mârgaśîrsha	1022	15 7	13 17	14 18	15 56	16 57	t.
1100 May 25 Fri.	Jyeshṭha	1023	4 58	3 21	—	—	6 35	11·5
1100 Nov. 18 Sun.	Mârgaśîrsha	1023	17 56	16 56	—	—	18 56	3·5
1102 Apr. 5 Sat.	Chaitra	1025	5 2	3 31	—	—	6 33	9·2
1102 Sept. 28 Sun.	Âśvina	1025	6 49	5 29	—	—	8 9	6·9
1103 Mar. 25 Wed.	Chaitra	1026	13 13	11 23	12 24	14 2	15 3	t.
1103 Sept. 17 Thur.	Âśvina	1026	20 40	18 48	19 48	21 32	22 32	t.
1104 Mar. 13 Sun.	Chaitra	1027	14 38	13 49	—	—	15 27	2·3

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1	2		3	4	5	6	7	8
1104 Sept. 6 Tues	Bhâdrapada	1027	13 10	11 52	—	—	14 28	6·5
1106 Jan. 21 Sun.	Mâgha	1028	9 10	7 37	—	—	10 43	10·0
1106 July 17 Tues.	Śrâvaṇa	1029	21 57	20 17	21 43	22 11	23 37	t.
1107 Jan. 10 Thur.	Mâgha	1029	23 58	22 7	23 8	24 48	25 49	t.
1107 July 6 Sat.	Âshâḍha	1030	22 32	20 46	21 56	23 8	24 18	t.
1107 Dec. 31 Tues.	Mâgha	1030	15 24	14 14	—	—	16 34	4·9
1109 May 16 Sun.	Jyeshtha	1032	4 55	3 43	—	—	6 7	5·2
1109 Nov. 9 Tues.	Kârttika	1032	12 25	11 9	—	—	13 41	6·0
1110 May 5 Thur.	Vaiśâkha	1033	21 56	20 4	21 5	22 47	23 48	t.
1110 Oct. 29 Sat.	Kârttika	1033	11 58	10 6	11 7	12 49	13 50	t.
1111 Apr. 25 Tues.	Vaiśâkha	1034	13 39	12 16	—	—	15 2	7·4
1111 Oct. 18 Wed.	Kârttika	1034	17 10	15 48	—	—	18 32	7·3
1113 Mar. 4 Tues.	Phâlguna	1035	9 36	8 10	—	—	11 2	8·1
1113 Aug. 28 Thur.	Bhâdrapada	1036	12 25	11 22	—	—	14 28	9·9
1114 Feb. 21 Sat.	Phâlguna	1036	11 0	9 9	10 10	11 50	12 51	t.
1114 Aug. 18 Tues.	Bhâdrapada	1037	2 8	0 18	1 19	2 57	3 58	t.
1115 Feb. 10 Wed.	Phâlguna	1037	19 13	18 4	—	—	20 22	4·7
1115 Aug. 7 Sat.	Śrâvaṇa	1038	8 33	7 57	—	—	9 9	1·2
1116 Dec. 21 Thur.	Pausha	1039	13 55	12 23	—	—	15 27	9·7
1117 June 15 Fri.	Âshâḍha	1040	23 52	22 6	23 17	24 27	25 38	t.
1117 Dec. 10 Mon.	Pausha	1040	23 34	21 43	22 44	24 24	25 25	t.
1118 June 5 Wed.	Jyeshṭha	1041	12 16	10 33	11 51	12 41	13 59	t.
1118 Nov. 30 Sat.	Mârgaśîrsha	1041	1 57	0 56	—	—	2 58	3·6
1120 Apr. 15 Thur.	Vaiśâkha	1043	12 38	11 13	—	—	14 3	7·9
1120 Oct. 8 Fri.	Âśvina	1043	15 0	13 42	—	—	16 18	6·4
1121 Apr. 4 Mon.	Chaitra	1044	20 29	18 38	19 39	21 19	22 20	t.
1121 Sept. 28 Wed.	Âśvina	1044	4 54	3 2	4 2	5 46	6 46	t.
1122 Mar. 24 Fri	Chaitra	1045	21 45	20 45	—	—	22 45	3·5
1122 Sept. 17 Sun.	Âśvina	1045	21 16	19 54	—	—	22 38	7·3
1124 Feb. 1 Fri.	Mâgha	1046	17 41	16 9	—	—	19 13	9·7
1124 July 28 Mon.	Śrâvaṇa	1047	4 35	3 0	—	—	6 10	10·6
1125 Jan. 21 Wed.	Mâgha	1047	8 42	6 51	7 52	9 32	10 33	t.
1125 July 17 Fri.	Śrâvaṇa	1048	5 8	3 19	4 25	5 51	6 57	t.
1126 Jan. 10 Sun.	Mâgha	1048	24 9	22 58	—	—	25 20	5·0
1126 July 6 Tues.	Âshâḍha	1049	8 50	8 19	—	—	9 21	0·9
1127 May 27 Fri.	Jyeshṭha	1050	12 23	11 23	—	—	13 23	3·5
1127 Nov. 20 Sun.	Mârgaśîrsha	1050	20 19	19 4	—	—	21 34	5·9
1128 May 16 Wed.	Jyeshṭha	1051	5 30	3 39	4 40	6 20	7 21	t.
1128 Nov. 8 Thur.	Kârttika	1051	19 58	18 6	19 7	20 49	21 50	t.
1129 May 5 Sun.	Vaiśâkha	1052	21 3	19 34	—	—	22 32	8·8
1129 Oct. 29 Tues.	Kârttika	1052	1 28	0 4	—	—	2 52	7·6
1131 Mar. 15 Sun.	Chaitra	1054	16 50	15 30	—	—	18 10	6·9
1131 Sept. 8 Tues.	Bhâdrapada	1054	20 53	19 24	—	—	22 22	8·7
1132 Mar. 3 Thur.	Phâlguna	1054	18 45	16 53	17 54	19 36	20 37	t.
1132 Aug. 28 Sun.	Bhâdrapada	1055	9 35	7 44	8 45	10 25	11 26	t.
1133 Feb. 21 Tues.	Phâlguna	1055	3 29	2 16	—	—	4 42	5·5
1133 Aug. 17 Thur.	Bhâdrapada	1056	15 31	14 37	—	—	16 25	2·8
1135 Jan. 1 Tues.	Pausha	1057	22 45	21 14	—	—	24 16	9·5
1135 June 27 Thur.	Âshâḍha	1058	6 47	5 5	6 24	7 10	8 29	t.
1135 Dec. 22 Sun.	Pausha	1058	8 1	6 10	7 11	8 51	9 52	t.

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		Greatest phase. [*i.e.* moment of full moon]	Beginning of Eclipse.	Period of total obscuration. Beginning.	Period of total obscuration. End.	End of Eclipse.	
		h. m.	h. m.	h. m.	h. m.	h. m.	
1	2	3	4	5	6	7	8
1136 June 15 Mon.	Âshâḍha 1059	19 39	17 53	19 3	20 15	21 25	t.
1136 Dec. 10 Thur.	Pausha 1059	10 2	8 59	—	—	11 5	3·9
1138 Apr. 26 Tues.	Vaiśâkha 1061	20 2	18 44	—	—	21 20	6·5
1138 Oct. 19 Wed.	Kârttika 1061	23 20	22 5	—	—	24 35	5·9
1139 Apr. 16 Sun.	Vaiśâkha 1062	3 34	1 42	2 42	4 26	5 26	t.
1139 Oct. 9 Mon.	Kârttika 1062	13 21	11 29	12 29	14 13	15 13	t.
1140 Apr. 4 Thur.	Chaitra 1063	4 41	3 30	—	—	5 52	5·0
1140 Sept. 28 Sat.	Âśvina 1063	5 28	4 3	—	—	6 53	7·9
1142 Feb. 12 Thur.	Phâlguna 1064	2 7	0 36	—	—	3 38	9·3
1142 Aug. 8 Sat.	Śrâvaṇa 1065	11 20	9 50	—	—	12 50	9·0
1143 Feb. 1 Mon.	Mâgha 1065	17 23	15 31	16 32	18 14	19 15	t.
1143 July 28 Wed.	Śrâvaṇa 1066	11 41	9 51	10 52	12 30	13 31	t.
1144 Jan. 22 Sat.	Mâgha 1066	8 51	7 39	—	—	10 3	5·2
1144 July 16 Sun.	Śrâvaṇa 1067	15 47	14 56	—	—	16 38	2·5
1145 June 6 Wed.	Jyeshṭha 1068	19 48	19 2	—	—	20 34	2·0
1145 Dec. 1 Sat.	Mârgaśîrsha 1068	4 20	3 6	—	—	5 34	5·6
1146 May 27 Mon.	Jyeshṭha 1069	13 0	11 10	12 13	13 47	14 50	t.
1146 Nov. 20 Wed.	Mârgaśîrsha 1069	4 2	2 10	3 11	4 53	5 54	t.
1147 May 17 Sat.	Jyeshṭha 1070	4 21	2 47	—	—	5 55	10·4
1147 Nov. 9 Sun.	Kârttika 1070	9 56	8 31	—	—	11 21	7·9
1149 Mar. 25 Fri.	Chaitra 1072	23 54	22 39	—	—	25 9	5·9
1149 Sept. 19 Mon.	Âśvina 1072	4 58	3 34	—	—	6 22	7·6
1150 Mar. 15 Wed.	Chaitra 1073	2 19	0 27	1 27	3 11	4 11	t.
1150 Sept. 8 Fri.	Bhâdrapada 1073	17 12	15 20	16 21	18 3	19 4	t.
1151 Mar. 4 Sun.	Phâlguna 1073	11 33	10 16	—	—	12 50	6·2
1151 Aug. 28 Tues.	Bhâdrapada 1074	22 28	21 24	—	—	23 32	4·0
1153 Jan. 12 Mon.	Mâgha 1075	7 20	5 49	—	—	8 51	9·3
1153 July 7 Tues.	Âshâḍha 1076	13 50	12 13	—	—	15 27	11·5
1154 Jan. 1 Fri.	Pausha 1076	16 22	14 31	15 32	17 12	18 13	t.
1154 June 27 Sun.	Âshâḍha 1077	3 0	1 12	2 17	3 43	4 48	t.
1154 Dec. 21 Tues.	Pausha 1077	18 7	17 4	—	—	19 10	3·9
1155 June 16 Thur.	Âshâḍha 1078	20 0	19 30	—	—	20 30	0·8
1156 May 7 Mon.	Vaiśâkha 1079	3 16	2 7	—	—	4 25	4·7
1156 Oct. 30 Tues.	Kârttika 1079	7 43	6 29	—	—	8 57	5·6
1157 Apr. 26 Fri.	Vaiśâkha 1080	10 27	8 35	9 36	11 18	12 19	t.
1157 Oct. 19 Sat.	Kârttika 1080	21 48	19 56	20 56	22 40	23 40	t.
1158 Apr. 15 Tues.	Vaiśâkha 1081	11 32	10 14	—	—	12 50	6·5
1158 Oct. 9 Thur.	Âśvina 1081	13 51	12 22	—	—	15 20	8·7
1160 Feb. 23 Tues.	Phâlguna 1082	10 23	8 53	—	—	11 53	8·9
1160 Aug. 18 Thur.	Bhâdrapada 1083	18 11	16 49	—	—	19 33	7·2
1161 Feb. 12 Sun.	Phâlguna 1083	1 56	0 4	1 5	2 47	3 48	t.
1161 Aug. 7 Mon.	Śrâvaṇa 1084	18 26	16 35	17 36	19 16	20 17	t.
1162 Feb. 1 Thur.	Mâgha 1084	17 23	16 11	—	—	18 35	5·3
1162 July 27 Fri.	Śrâvaṇa 1085	22 51	21 45	—	—	23 57	4·3
1163 June 18 Tues.	Âshâḍha 1086	3 11	2 45	—	—	3 37	0·6
1163 Dec. 12 Thur.	Pausha 1086	12 26	11 13	—	—	13 39	5·4
1164 June 6 Sat.	Jyeshṭha 1087	20 25	18 37	19 42	21 8	22 13	t.
1164 Nov. 30 Mon.	Mârgaśîrsha 1087	12 15	10 23	11 24	13 6	14 7	t.
1165 May 27 Thur.	Jyeshṭha 1088	11 36	9 57	11 36	11 36	13 15	t.
1165 Nov. 19 Fri.	Mârgaśîrsha 1088	18 24	16 57	—	—	19 51	8·2

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1	2		3	4	5	6	7	8
1167 Apr. 6 Thur.	Chaitra	1090	6 57	5 50	—	—	8 4	4·5
1167 Sept. 30 Sat.	Âśvina	1090	13 8	11 48	—	—	14 28	6·9
1168 Mar. 25 Mon.	Chaitra	1091	9 45	7 53	8 53	10 37	11 37	t.
1168 Sept. 18 Wed.	Âśvina	1091	24 55	23 3	24 3	25 47	26 47	t.
1169 Mar. 14 Fri.	Chaitra	1092	19 33	18 12	—	—	20 54	7·1
1169 Sept. 8 Mon.	Bhâdrapada	1092	5 37	4 25	—	—	6 49	5·3
1171 Jan. 23 Sat.	Mâgha	1093	15 56	14 25	—	—	17 27	9 2
1171 July 18 Sun.	Śrâvaṇa	1094	20 54	19 21	—	—	22 27	9·9
1172 Jan. 12 Wed.	Mâgha	1094	24 38	22 47	23 48	25 28	26 29	t.
1172 July 7 Fri.	Âshâḍha	1095	10 25	8 35	9 38	11 12	12 15	t.
1173 Jan. 1 Mon.	Pausha	1095	2 8	1 3	—	—	3 13	4·2
1173 June 27 Wed.	Âshâḍha	1096	3 26	2 37	—	—	4 15	2·3
1174 May 18 Sat.	Jyeshṭha	1097	10 28	9 30	—	—	11 26	3·2
1174 Nov. 10 Sun.	Mârgaśîrsha	1097	16 13	15 0	—	—	17 26	5·4
1175 May 7 Wed.	Vaiśâkha	1098	17 15	15 25	16 26	18 4	19 5	t.
1175 Oct. 31 Fri.	Kârttika	1098	6 31	4 39	5 40	7 22	8 23	t.
1176 Apr. 25 Sun.	Vaiśâkha	1099	18 12	16 46	—	—	19 38	8·1
1176 Oct. 19 Tues.	Kârttika	1099	22 23	20 53	—	—	23 53	9·0
1178 Mar. 5 Sun.	Phâlguna	1100	18 37	17 10	—	—	20 4	8·2
1178 Aug. 29 Tues.	Bhâdrapada	1101	25 6	23 51	—	—	26 21	5·9
1179 Feb. 23 Fri.	Phâlguna	1101	10 27	8 35	9 36	11 18	12 19	t.
1179 Aug. 18 Sat.	Bhâdrapada	1102	25 20	23 28	24 28	26 12	27 12	t.
1180 Feb. 13 Wed.	Phâlguna	1102	1 54	0 40	—	—	3 8	5·7
1180 Aug. 7 Thur.	Śrâvaṇa	1103	6 2	4 47	—	—	7 17	5·8
1181 Dec. 22 Tues.	Pausha	1104	20 26	19 14	—	—	21 38	5·2
1182 June 18 Fri.	Âshâḍha	1105	3 55	2 9	3 19	4 31	5 41	t.
1182 Dec. 11 Sat.	Pausha	1105	20 30	18 38	19 39	21 21	22 22	t.
1183 June 7 Tues.	Jyeshṭha	1106	18 45	17 2	18 17	19 13	20 28	t.
1183 Dec. 1 Thur.	Mârgaśîrsha	1106	2 59	1 32	—	—	4 26	8·3
1185 Apr. 16 Tues.	Vaiśâkha	1108	13 44	12 48	—	—	14 40	3·0
1185 Oct. 10 Thur.	Âśvina	1108	21 27	20 9	—	—	22 45	6·4
1186 Apr. 5 Sat.	Chaitra	1109	17 6	15 15	16 16	17 56	18 57	t.
1186 Sept. 30 Tues.	Âśvina	1109	8 40	6 48	7 49	9 31	10 32	t.
1187 Mar. 26 Thur.	Chaitra	1110	3 27	2 0	—	—	4 54	8·2
1187 Sept. 19 Sat.	Âśvina	1110	12 57	11 40	—	—	14 14	6·3
1189 Feb. 2 Thur.	Mâgha	1111	24 25	22 56	—	—	25 54	8·7
1189 July 29 Sat.	Śrâvaṇa	1112	4 9	2 42	—	—	5 36	8·2
1190 Jan. 23 Tues.	Mâgha	1112	8 50	6 59	8 0	9 40	10 41	t.
1190 July 18 Wed.	Śrâvaṇa	1113	17 55	16 4	17 5	18 45	19 46	t.
1191 Jan. 12 Sat.	Mâgha	1113	10 8	9 2	—	—	11 14	4·3
1191 July 8 Mon.	Ashâḍha	1114	11 2	10 0	—	—	12 4	3·8
1192 May 28 Thur.	Jyeshṭha	1115	17 31	16 52	—	—	18 10	1·4
1192 Nov. 20 Fri.	Mârgaśîrsha	1115	24 55	23 42	—	—	26 8	5·4
1193 May 17 Mon.	Jyeshṭha	1116	23 56	22 7	23 11	24 41	25 45	t.
1193 Nov. 10 Wed.	Kârttika	1116	15 17	13 25	14 26	16 8	17 9	t.
1194 May 6 Fri.	Vaiśâkha	1117	24 50	23 17	—	—	26 23	9·9
1194 Oct. 31 Mon.	Kârttika	1117	6 58	5 27	—	—	8 29	9·3
1196 Mar. 16 Sat.	Chaitra	1119	2 45	1 22	—	—	4 8	7·4
1196 Sept. 9 Mon.	Bhâdrapada	1119	8 12	7 5	—	—	9 19	4·4
1197 Mar. 5 Wed.	Phâlguna	1119	18 48	16 56	17 56	19 40	20 40	t.

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			h.	m.	h.	m.	h.	m.	h.	m.	h.	m.	
1	2		3		4		5		6		7		8
1197 Aug. 29 Fri.	Bhâdrapada	1120	8	17	6	25	7	26	9	8	10	9	t.
1198 Feb. 23 Mon.	Phâlguna	1120	10	13	8	56	—		—		11	30	6·3
1198 Aug. 18 Tues.	Phâdrapada	1121	13	19	11	57	—		—		14	41	7·2
1200 Jan. 3 Mon.	Pausha	1122	4	28	3	17	—		—		5	39	5·1
1200 June 28 Wed.	Âshâḍha	1123	11	20	9	37	10	54	11	46	13	3	t.
1200 Dec. 22 Fri.	Pausha	1123	4	44	2	52	3	53	5	35	6	36	t.
1201 June 18 Mon.	Âshâḍha	1124	1	54	0	8	1	18	2	30	3	40	t.
1201 Dec. 11 Tues.	Pausha	1124	11	34	10	6	—		—		13	2	8·5
1203 Apr. 27 Sun.	Vaiśâkha	1126	20	27	19	44	—		—		21	10	1·7
1203 Oct. 22 Wed.	Kârttika	1126	5	52	4	38	—		—		7	6	5·7
1204 Apr. 15 Thur.	Vaiśâkha,	1127	24	18	22	28	23	29	25	7	26	8	t.
1204 Oct. 10 Sun.	Âśvina	1127	16	41	14	49	15	50	17	32	18	33	t.
1205 Apr. 5 Tues.	Chaitra	1128	11	13	9	42	—		—		12	44	9·4
1205 Sept. 29 Thur.	Âśvina	1128	20	18	18	57	—		—		21	39	7·0
1207 Feb. 14 Wed.	Phâlguna	1129	8	47	7	20	—		—		10	14	8·2
1207 Aug. 9 Thur.	Śrâvaṇa	1130	11	29	10	9	—		—		12	49	6·9
1208 Feb. 3 Sun.	Mâgha	1130	16	55	15	4	16	5	17	45	18	46	t.
1208 July 28 Mon.	Śrâvaṇa	1131	25	29	23	37	24	38	26	20	27	21	t.
1209 Jan. 22 Thur.	Mâgha	1131	18	1	16	54	—		—		19	8	4·5
1209 July 18 Sat.	Śrâvaṇa	1132	18	34	17	21	—		—		19	47	5·4
1210 Dec. 2 Thur.	Mârgaśîrsha	1133	9	33	8	21	—		—		10	45	5·3
1211 May 29 Sun.	Jyeshṭha	1134	6	32	4	45	5	52	7	12	8	19	t.
1211 Nov. 21 Mon.	Mârgaśırsha	1134	24	5	22	13	23	14	24	56	25	57	t.
1212 May 17 Thur.	Jyeshṭha	1135	7	21	5	43	—		—		8	59	11·8
1212 Nov. 10 Sat.	Kârttika	1135	15	37	14	6	—		—		17	8	9·5
1214 Mar. 27 Thur.	Chaitra	1137	10	40	9	21	—		—		11	59	6·6
1214 Sept. 20 Sat.	Âśvina	1137	15	23	14	25	—		—		16	21	3·3
1215 Mar. 17 Tues.	Chaitra	1138	2	57	1	5	2	5	3	49	4	49	t.
1215 Sept. 9 Wed.	Bhâdrapada	1138	15	27	13	36	14	37	16	17	17	18	t.
1216 Mar. 5 Sat.	Phâlguna	1138	18	24	17	4	—		—		19	44	6·9
1216 Aug. 28 Sun.	Bhâdrapada	1139	20	44	19	16	—		—		22	12	8·5
1218 Jan. 13 Sat.	Mâgha	1140	12	27	11	17	—		—		13	37	4·8
1218 July 9 Mon.	Âshâḍha	1141	18	46	17	8	—		—		20	24	11·7
1219 Jan. 2 Wed.	Pausha	1141	13	0	11	9	12	10	13	50	14	51	t.
1219 June 29 Sat.	Âshâḍha	1142	9	2	7	13	8	18	9	46	10	51	t.
1219 Dec. 22 Sun.	Pausha	1142	20	16	18	47	—		—		21	45	8·7
1221 Nov. 1 Mon.	Kârttika	1144	14	24	13	11	—		—		15	37	5·5
1222 Apr. 27 Wed.	Vaiśâkha	1145	7	28	5	38	6	42	8	14	9	18	t.
1222 Oct. 21 Fri.	Kârttika	1145	24	44	22	53	23	54	25	34	26	35	t.
1223 Apr. 16 Sun.	Vaiśâkha	1146	18	52	17	17	—		—		20	27	10·7
1223 Oct. 11 Wed.	Âśvina	1146	3	53	2	29	—		—		5	17	7·7
1225 Feb. 24 Mon.	Phâlguna	1147	16	59	15	35	—		—		18	23	7·7
1225 Aug. 19 Tues.	Bhâdrapada	1148	18	59	17	45	—		—		20	13	5·6
1226 Feb. 13 Fri.	Phâlguna	1148	24	53	23	1	24	2	25	44	26	45	t.
1226 Aug. 9 Sun.	Śrâvaṇa	1149	9	9	7	17	8	17	10	1	11	1	t.
1227 Feb. 3 Wed.	Mâgha	1149	1	52	0	40	—		—		3	4	5·2
1227 July 30 Fri.	Śrâvaṇa	1150	2	4	0	45	—		—		3	23	6·7
1228 Dec. 12 Tues.	Pausha	1151	18	17	17	4	—		—		19	30	5·4
1229 June 8 Fri.	Jyeshṭha II	1152	13	4	11	20	12	35	13	33	14	48	t.
1229 Dec. 2 Sun.	Mârgaśîrsha	1152	8	56	7	4	8	5	9	47	10	48	t.

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1	2		3	4	5	6	7	8
1230 May 28 Tues.	Jyeshṭha	1153	13 46	12 3	13 19	14 13	15 29	t.
1230 Nov. 21 Thur.	Mârgaśîrsha	1153	24 19	22 48	—	—	25 50	9·5
1232 Apr. 6 Tues.	Chaitra	1155	18 31	17 18	—	—	19 44	5·5
1232 Sept. 30 Thur.	Âśvina	1155	22 43	21 51	—	—	23 35	2·6
1233 Mar. 27 Sun.	Chaitra	1156	11 3	9 11	10 12	11 54	12 55	t.
1233 Sept. 19 Mon.	Âśvina	1156	22 43	20 53	21 55	23 31	24 33	t.
1234 Mar. 17 Fri.	Chaitra	1157	2 22	0 58	—	—	3 46	7·7
1234 Sept. 9 Sat.	Bhâdrapada	1157	4 23	2 51	—	—	5 55	9·7
1236 Jan. 24 Thur.	Mâgha	1158	20 17	19 10	—	—	21 24	4·4
1236 July 20 Sun.	Śrâvaṇa	1159	2 19	0 46	—	—	3 52	10·0
1237 Jan. 12 Mon.	Mâgha	1159	21 14	19 23	20 24	22 4	23 5	t.
1237 July 9 Thur.	Âshâḍha	1160	16 9	14 19	15 21	16 57	17 59	t.
1238 Jan. 2 Sat.	Pausha	1160	4 55	3 26	—	—	6 24	8·7
1238 June 28 Mon.	Âshâḍha	1161	23 12	22 51	—	—	23 33	0·4
1239 Nov. 12 Sat.	Mârgaśîrsha	1162	22 58	21 46	—	—	24 10	5·2
1240 May 7 Mon.	Vaiśâkha II	1163	14 33	12 46	13 52	15 14	16 20	t.
1240 Nov. 1 Thur.	Kârttika	1163	8 52	7 1	8 2	9 42	10 43	t.
1241 Apr. 27 Sat.	Vaiśâkha	1164	2 27	0 47	2 17	2 37	4 7	t,
1241 Oct. 21 Mon.	Kârttika	1164	11 35	10 8	—	—	13 2	8·3
1243 Mar. 7 Sat.	Phâlguna	1165	25 3	23 43	—	—	26 23	6·9
1243 Aug. 31 Mon.	Bhâdrapada	1166	2 32	1 24	—	—	3 40	4·6
1244 Feb. 25 Thur.	Phâlguna	1166	8 39	6 47	7 47	9 31	10 31	t.
1244 Aug. 19 Fri.	Bhâdrapada	1167	16 53	15 1	16 2	17 44	18 45	t.
1245 Feb. 13 Mon.	Phâlguna	1167	9 30	8 16	—	—	10 44	5·7
1245 Aug. 9 Wed.	Śrâvaṇa	1168	9 46	8 20	—	—	11 12	8·1
1246 Dec. 24 Mon.	Pausha	1169	3 4	1 51	—	—	4 17	5·5
1247 June 19 Wed.	Âshâḍha	1170	19 31	17 53	—	—	21 9	11·8
1247 Dec. 13 Fri.	Pausha	1170	17 49	15 57	16 58	18 40	19 41	t.
1248 June 7 Sun.	Jyeshṭha II	1171	20 13	18 26	19 34	20 52	22 0	t.
1248 Dec. 2 Wed.	Mârgaśîrsha	1171	9 9	7 38	—	—	10 40	9·5
1250 Apr. 18 Mon.	Vaiśâkha	1173	2 16	1 10	—	—	3 22	4·3
1250 Oct. 12 Wed.	Âśvina II	1173	6 17	5 33	—	—	7 1	1·8
1251 Apr. 7 Fri.	Chaitra	1174	18 59	17 8	18 9	19 49	20 50	t.
1251 Oct. 1 Sun.	Âśvina	1174	6 18	4 28	5 32	7 4	8 8	t.
1252 Mar. 27 Wed.	Chaitra	1175	10 17	8 48	—	—	11 46	8·8
1252 Sept. 19 Thur.	Âśvina	1175	12 8	10 33	—	—	13 43	10·7
1254 Feb. 4 Wed.	Mâgha	1176	4 6	3 1	—	—	5 11	4·2
1254 July 31 Fri.	Śrâvaṇa	1177	9 50	8 22	—	—	11 18	8·6
1255 Jan. 24 Sun.	Mâgha	1177	5 22	3 31	4 32	6 12	7 13	t.
1255 July 20 Tues.	Śrâvaṇa	1178	23 13	21 22	22 23	24 3	25 4	t.
1256 Jan. 13 Thur.	Mâgha	1178	13 33	12 3	—	—	15 3	8·9
1256 July 9 Sun.	Âshâḍha	1179	5 50	5 2	—	—	6 38	2·2
1257 Nov. 23 Fri.	Mârgaśîrsha	1180	7 36	6 26	—	—	8 46	4·9
1258 May 18 Sat.	Jyeshṭha	1181	21 34	19 49	21 0	22 8	23 19	t.
1258 Nov. 12 Tues.	Kârttika II	1181	17 2	15 11	16 12	17 52	18 53	t.
1259 May 8 Thur.	Vaiśâkha	1182	9 59	8 16	9 31	10 27	11 42	t
1259 Nov. 1 Sat.	Kârttika	1182	19 21	17 53	—	—	20 49	8·6
1261 Mar. 18 Fri.	Chaitra	1184	8 57	7 41	—	—	10 13	6·0
1261 Sept. 10 Sat.	Bhâdrapada II	1184	10 20	9 19	—	—	11 21	3·6
1262 Mar. 7 Tues.	Phâlguna	1184	16 15	14 23	15 23	17 7	18 7	t.

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1	2	3	4	5	6	7	8
1262 Aug. 30 Wed.	Bhâdrapada 1185	24 45	22 54	23 55	25 35	26 36	t.
1263 Feb. 24 Sat.	Phâlguna 1185	17 0	15 42	—	—	18 18	6·5
1263 Aug. 20 Mon.	Bhâdrapada 1186	17 34	16 3	—	—	19 5	9·3
1265 Jan. 3 Sat.	Pausha 1187	11 46	10 34	—	—	12 58	5·3
1265 June 30 Tues.	Âshâḍha 1188	1 59	0 26	—	—	3 32	9·9
1265 Dec. 24 Thur.	Pausha 1188	2 44	0 53	1 54	3 34	4 35	t.
1266 June 19 Sat.	Âshâḍha 1189	2 37	0 48	1 52	3 22	4 26	t.
1266 Dec. 13 Mon.	Pausha 1189	17 55	16 23	—	—	19 27	9·6
1267 June 8 Wed.	Jyeshṭha II 1190	6 36	5 58	—	—	7 14	1·3
1268 Apr. 28 Sat.	Vaiśâkha 1191	9 53	8 57	—	—	10 49	3·0
1268 Oct. 22 Mon.	Kârttika 1191	13 54	13 16	—	—	14 32	1·3
1269 Apr. 18 Thur.	Vaiśâkha 1192	2 48	0 58	1 59	3 37	4 38	t.
1269 Oct. 11 Fri.	Âśvina II 1192	14 0	12 11	13 16	14 44	15 49	t.
1270 Apr. 7 Mon.	Chaitra 1193	18 0	16 27	—	—	19 33	9·9
1270 Sept. 30 Tues.	Âśvina 1193	20 4	18 27	—	—	21 41	11·3
1272 Feb. 15 Mon.	Phâlguna 1194	11 44	10 42	—	—	12 46	3·7
1272 Aug. 10 Wed.	Śrâvaṇa 1195	17 26	16 5	—	—	18 47	7·1
1273 Feb. 3 Fri.	Mâgha 1195	13 27	11 36	12 37	14 17	15 18	t.
1273 July 31 Mon.	Śrâvaṇa 1196	6 23	4 31	5 31	7 15	8 15	t.
1274 Jan. 23 Tues.	Mâgha 1196	22 3	20 32	—	—	23 34	9·2
1274 July 20 Fri.	Śrâvaṇa 1197	12 25	11 23	—	—	13 27	3·8
1275 Dec. 4 Wed.	Mârgaśîrsha 1198	16 21	15 12	—	—	17 30	4·7
1276 May 29 Fri.	Jyeshṭha 1199	4 31	2 49	4 10	4 52	6 13	t.
1276 Nov. 22 Sun.	Mârgaśîrsha 1199	25 24	23 34	24 35	26 13	27 14	t.
1277 May 18 Tues.	Jyeshṭha 1200	17 22	15 36	16 45	17 59	19 8	t.
1277 Nov. 12 Fri.	Kârttika II 1200	3 14	1 44	—	—	4 44	9·0
1279 Mar. 29 Wed.	Chaitra 1202	16 38	15 28	—	—	17 48	4·9
1279 Sept. 21 Thur.	Âśvina 1202	18 16	17 22	—	—	19 10	2·8
1280 Mar. 17 Sun.	Chaitra 1203	23 45	21 53	22 54	24 36	25 37	t.
1280 Sept. 10 Tues.	Bhâdrapada 1203	8 50	7 0	8 1	9 39	10 40	t.
1281 Mar. 6 Thur.	Phâlguna 1203	24 22	23 0	—	—	25 44	7·3
1281 Aug. 30 Sat.	Bhâdrapada 1204	25 25	23 51	—	—	26 59	10·5
1283 Jan. 14 Thur.	Mâgha 1205	20 31	19 19	—	—	21 43	5·2
1283 July 11 Sun.	Âshâḍha II 1206	8 31	7 5	—	—	9 57	8·1
1284 Jan. 4 Tues.	Pausha 1206	11 36	9 45	10 46	12 26	13 27	t.
1284 June 29 Thur.	Ashâḍha 1207	9 5	7 15	8 16	9 54	10 55	t.
1284 Dec. 24 Sun.	Pausha 1207	2 44	1 12	—	—	4 16	9·7
1285 June 18 Mon.	Âshâḍha 1208	13 25	12 29	—	—	14 21	3·0
1286 May 9 Thur.	Vaiśâkha II 1209	17 27	16 45	—	—	18 9	1·6
1286 Nov. 2 Sat.	Kârttika 1209	21 41	21 11	—	—	22 11	0·8
1287 Apr. 29 Tues.	Vaiśâkha 1210	10 31	8 41	9 45	11 17	12 21	t.
1287 Oct. 22 Wed.	Kârttika 1210	21 45	19 57	21 3	22 27	23 33	t.
1288 Apr. 18 Sun.	Vaiśâkha 1211	1 36	0 0	—	—	3 12	11·0
1288 Oct. 11 Mon.	Âśvina 1211	4 8	2 28	3 58	4 18	5 48	t.
1290 Feb. 25 Sat.	Phâlguna 1212	19 17	18 22	—	—	20 12	2·9
1290 Aug. 21 Mon.	Bhâdrapada 1213	25 11	23 57	—	—	26 25	5·6
1291 Feb. 14 Wed.	Phâlguna 1213	21 24	19 34	20 35	22 13	23 14	t.
1291 Aug. 11 Sat.	Śrâvaṇa 1214	13 40	11 48	12 48	14 32	15 32	t.
1292 Feb. 4 Mon.	Mâgha 1214	6 31	5 0	—	—	8 2	9·5
1292 July 30 Wed.	Śrâvaṇa 1215	19 10	17 57	—	—	20 23	5·5

TABLE E.

A.D. Year, Month, and Day.	Hindu Month and Current Śaka Year. ["w. m. i." = with mean intercalations.]	Time measured from Laṅka mean sunrise, taken as 6 A.M. — Greatest phase. [i.e. moment of full moon] h. m.	Beginning of Eclipse. h. m.	Period of total obscuration. Beginning. h. m.	Period of total obscuration. End. h. m.	End of Eclipse. h. m.	Number of twelfths eclipsed. ["t." = total eclipse.]
1	2	3	4	5	6	7	8
1293 Dec. 14 Mon.	Pausha 1216	25 5	23 57	—	—	26 13	4·6
1294 June 9 Wed.	Jyeshṭha II 1217	11 32	9 56	—	—	13 8	11·1
1294 Dec. 4 Sat.	Mârgaśîrsha 1217	9 43	7 53	8 54	10 32	11 33	t.
1295 May 29 Sun.	Jyeshṭha 1218	24 49	23 0	24 6	25 32	26 38	t.
1295 Nov. 23 Wed.	Mârgaśîrsha 1218	11 15	9 44	—	—	12 46	9·2
1296 May 18 Fri.	Jyeshṭha 1219	17 47	17 11	—	—	18 23	1·2
1297 Apr. 8 Mon.	Chaitra 1220	24 15	23 13	—	—	25 17	3·7
1297 Oct. 2 Wed.	Âśvina 1220	2 20	1 34	—	—	3 6	2·0
1298 Mar. 29 Sat.	Chaitra 1221	7 0	5 9	6 10	7 50	8 51	t.
1298 Sept. 21 Sun.	Âśvina 1221	17 0	15 10	16 12	17 48	18 50	t.
1299 Mar. 18 Wed.	Chaitra 1222	7 40	6 12	—	—	9 8	8·5
1299 Sept. 11 Fri.	Bhâdrapada 1222	9 25	7 48	—	—	11 2	11·5
1301 Jan. 25 Wed.	Mâgha 1223	5 5	3 53	—	—	6 17	5·2
1301 July 21 Fri.	Śrâvaṇa 1224	15 5	13 48	—	—	16 22	6·3
1302 Jan. 14 Sun.	Mâgha 1224	20 27	18 36	19 37	21 17	22 18	t.
1302 July 10 Tues.	Âshâḍha II 1225	15 37	13 45	14 46	16 28	17 29	t.
1303 Jan. 4 Fri.	Pausha 1225	11 29	9 57	—	—	13 1	9·7
1303 June 29 Sat.	Âshâḍha 1226	20 19	19 9	—	—	21 29	4·9
1304 May 20 Wed.	Jyeshṭha 1227	0 59	0 44	—	—	1 14	0·2
1304 Nov. 13 Fri.	Mârgaśîrsha 1227	5 35	5 14	—	—	5 56	0·4
1305 May 9 Sun.	Vaiśâkha II 1228	18 9	16 22	17 27	18 51	19 56	t.
1305 Nov. 2 Tues.	Kârttika 1228	5 47	4 0	5 6	6 28	7 34	t.
1306 Apr. 29 Fri.	Vaiśâkha 1229	9 1	7 21	8 45	9 17	10 41	t.
1306 Oct. 22 Sat.	Kârttika 1229	12 25	10 45	12 9	12 41	14 5	t.
1308 Mar. 8 Fri.	Phâlguna 1230	2 38	1 50	—	—	3 26	2·2
1308 Sept. 1 Sun.	Bhâdrapada 1231	8 56	7 49	—	—	10 3	4·5
1309 Feb. 25 Tues.	Phâlguna 1231	5 14	3 24	4 25	6 3	7 4	t.
1309 Aug. 21 Thur.	Bhâdrapada 1232	20 56	19 5	20 6	21 46	22 47	t.
1310 Feb. 14 Sat.	Phâlguna 1232	14 53	13 20	—	—	16 26	10·1
1310 Aug. 11 Tues.	Śrâvaṇa 1233	1 57	0 35	—	—	3 19	7·3
1311 Dec. 26 Sun.	Pausha 1234	9 47	8 40	—	—	10 54	4·4
1312 June 19 Mon.	Âshâḍha 1235	18 36	17 5	—	—	20 7	9·4
1312 Dec. 14 Thur.	Pausha 1235	18 1	16 11	17 12	18 50	19 51	t.
1313 June 9 Sat.	Jyeshṭha II 1236	8 13	6 23	7 25	9 1	10 3	t.
1313 Dec. 3 Mon.	Mârgaśîrsha 1236	19 15	17 44	—	—	20 46	9·4
1314 May 30 Thur.	Jyeshṭha 1237	1 16	0 25	—	—	2 7	2·5
1315 Apr. 20 Sun.	Vaiśâkha 1238	7 40	6 51	—	—	8 29	2·3
1315 Oct. 13 Mon.	Kârttika I 1238	10 35	9 55	—	—	11 15	1·5
1316 Apr. 8 Thur.	Chaitra 1239	14 3	12 13	13 16	14 50	15 53	t.
1316 Oct. 1 Fri.	Âśvina 1239	25 20	23 30	24 34	26 6	27 10	t.
1317 Mar. 28 Mon.	Chaitra 1240	14 42	13 10	—	—	16 14	9·8
1317 Sept. 21 Wed.	Âśvina 1240	17 30	15 50	17 18	17 42	19 10	t.
1319 Feb 5 Mon.	Mâgha 1241	13 40	12 30	—	—	14 50	4·8
1319 Aug. 1 Wed.	Śrâvaṇa 1242	21 40	20 33	—	—	22 47	4·4
1320 Jan. 26 Sat.	Mâgha 1242	5 11	3 20	4 21	6 1	7 2	t.
1320 July 20 Sun.	Śrâvaṇa 1243	22 11	20 19	21 20	23 2	24 3	t.
1321 Jan. 14 Wed.	Mâgha 1243	20 10	18 37	—	—	21 43	9·9
1321 July 10 Fri.	Âshâḍha II 1244	3 16	1 57	—	—	4 35	6·6
1323 May 20 Fri.	Jyeshṭha 1246	25 39	23 54	25 5	26 13	27 24	t.
1323 Nov. 13 Sun.	Mârgaśîrsha 1246	13 51	12 4	13 11	14 31	15 38	t.

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			Greatest phase. [i.e. moment of fullmoon]	Beginning of Eclipse.	Period of total obscuration. Beginning.	Period of total obscuration. End.	End of Eclipse.	
			h. m.	h. m.	h. m.	h. m.	h. m.	
1	2		3	4	5	6	7	8
1324 May 9 Wed.	Vaiśâkha II	1247	16 23	14 39	15 53	16 53	18 7	t.
1324 Nov. 1 Thur.	Kârttika	1247	20 50	19 9	20 30	21 10	22 31	t.
1326 Mar. 19 Wed.	Chaitra	1249	9 55	9 19	—	—	10 31	1·2
1326 Sept. 12 Fri.	Bhâdrapada II	1249	16 53	15 54	—	—	17 52	3·4
1327 Mar. 8 Sun.	Phâlguna	1249	13 1	11 11	12 14	13 48	14 51	t.
1327 Sept. 2 Wed.	Bhâdrapada	1250	4 23	2 33	3 34	5 12	6 13	t.
1328 Feb. 25 Thur.	Phâlguna	1250	23 8	21 32	—	—	24 44	10·9
1328 Aug. 21 Sun.	Bhâdrapada	1251	8 51	7 23	—	—	10 19	8·4
1330 Jan. 5 Fri.	Pausha	1252	18 27	17 21	—	—	19 33	4·3
1330 July 1 Sun.	Âshâḍha	1253	1 37	0 12	—	—	3 2	7·8
1330 Dec. 26 Wed.	Pausha	1253	2 22	0 32	1 33	3 11	4 12	t.
1331 June 20 Thur.	Âshâḍha	1254	15 34	13 43	14 44	16 24	17 25	t.
1331 Dec. 15 Sun.	Pausha	1254	3 19	1 47	—	—	4 51	9·7
1332 June 9 Tues.	Jyeshṭha II	1255	8 48	7 43	—	—	9 53	4·1
1333 Apr. 30 Fri.	Vaiśâkha	1256	14 57	14 29	—	—	15 25	0·7
1333 Oct. 23 Sat.	Kârttika	1256	18 58	18 22	—	—	19 34	1·2
1334 Apr. 19 Tues.	Vaiśâkha	1257	21 2	19 14	20 19	21 45	22 50	t.
1334 Oct. 13 Thur.	Âśvina II	1257	9 45	7 56	9 0	10 30	11 34	t.
1335 Apr. 8 Sat.	Chaitra	1258	21 40	20 3	—	—	23 17	11·2
1335 Oct. 3 Tues.	Âśvina	1258	1 43	0 1	1 22	2 4	3 25	t.
1337 Feb. 15 Sat.	Phâlguna	1259	22 8	21 1	—	—	23 15	4·5
1337 Aug. 12 Tues.	Śrâvaṇa II	1260	4 23	3 29	—	—	5 17	2·8
1338 Feb. 5 Thur.	Mâgha	1260	13 53	12 2	13 3	14 43	15 44	t.
1338 Aug. 1 Sat.	Śrâvaṇa	1261	4 51	3 1	4 2	5 40	6 41	t.
1339 Jan. 26 Tues.	Mâgha	1261	4 51	3 17	—	—	6 25	10·2
1339 July 21 Wed.	Śrâvaṇa	1262	10 20	8 52	—	—	11 48	8·4
1341 May 31 Thur.	Jyeshṭha	1264	9 10	7 28	8 47	9 33	10 52	t.
1341 Nov. 23 Fri.	Mârgaśîrsha	1264	22 1	20 15	21 23	22 39	23 47	t.
1342 May 20 Mon.	Jyeshṭha	1265	23 38	21 52	23 0	24 16	25 24	t.
1342 Nov. 13 Wed.	Mârgaśîrsha	1265	5 20	3 37	4 55	5 45	7 3	t.
1344 Sept. 23 Thur.	Âśvina	1267	0 57	0 7	—	—	1 47	2·4
1345 Mar. 18 Fri.	Chaitra	1268	20 38	18 49	19 54	21 22	22 27	t.
1345 Sept. 12 Mon.	Âśvina	1268	11 56	10 6	11 9	12 43	13 46	t.
1346 Mar. 8 Wed.	Phâlguna	1268	7 19	5 42	—	—	8 56	11·5
1346 Sept. 1 Fri.	Bhâdrapada	1269	15 48	14 16	—	—	17 20	9·7
1348 Jan. 17 Thur.	Mâgha	1270	3 5	2 0	—	—	4 10	4·2
1348 July 11 Fri.	Âshâḍha II	1271	8 47	7 30	—	—	10 4	6·2
1349 Jan. 5 Mon.	Pausha	1271	10 39	8 49	9 51	11 27	12 29	t.
1349 June 30 Tues.	Âshâḍha	1272	23 1	21 9	22 9	23 53	24 53	t.
1349 Dec. 25 Fri.	Pausha	1272	11 18	9 46	—	—	12 50	9·8
1350 June 20 Sun.	Âshâḍha	1273	16 15	15 0	—	—	17 30	5·8
1351 Nov. 4 Fri.	Mârgaśîrsha	1274	3 29	2 56	—	—	4 2	1·0
1352 Apr. 30 Mon.	Vaiśâkha	1275	3 50	2 5	3 15	4 25	5 35	t.
1352 Oct. 23 Tues.	Kârttika	1275	18 19	16 30	17 36	19 2	20 8	t.
1353 Apr. 19 Fri.	Vaiśâkha	1276	4 26	2 45	4 6	4 46	6 7	t.
1353 Oct. 13 Sun.	Âśvina	1276	10 8	8 25	9 41	10 35	11 51	t.
1355 Feb. 27 Fri.	Phâlguna	1277	6 30	5 26	—	—	7 34	4·0
1355 Aug. 23 Sun.	Bhâdrapada	1278	11 13	10 35	—	—	11 51	1·3
1356 Feb. 16 Tues.	Phâlguna	1278	22 24	20 34	21 35	23 13	24 14	t.
1356 Aug. 11 Thur.	Śrâvaṇa II	1279	11 43	9 53	10 57	12 29	13 33	t.

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1	2		3	4	5	6	7	8
1357 Feb. 5 Sun.	Mâgha	1279	13 21	11 47	—	—	14 55	10·4
1357 July 31 Mon.	Śrâvaṇa	1280	17 31	15 58	—	—	19 4	10·1
1359 June 11 Tues.	Jyeshṭha II	1282	16 33	14 56	—	—	18 10	11·2
1359 Dec. 5 Thur.	Mârgaśirsha	1282	6 18	4 32	5 40	6 56	8 4	t.
1360 May 31 Sun.	Jyeshṭha	1283	6 43	4 54	5 58	7 28	8 32	t.
1360 Nov. 23 Mon.	Mârgaśîrsha	1283	13 54	12 11	13 27	14 21	15 37	t.
1362 Oct. 4 Tues.	Âśvina	1285	9 7	8 23	—	—	9 51	1·8
1363 Mar. 30 Thur.	Chaitra	1286	4 7	2 20	3 25	4 49	5 54	t.
1363 Sept. 23 Sat.	Âśvina	1286	19 34	17 45	18 51	20 17	21 23	t.
1364 Mar. 18 Mon.	Chaitra	1287	15 23	13 43	15 7	15 39	17 3	t.
1364 Sept. 11 Wed.	Bhâdrapada II	1287	22 56	21 20	—	—	24 32	11·0
1366 Jan. 27 Tues.	Mâgha	1288	11 33	10 31	—	—	12 35	3·8
1366 July 22 Wed.	Śrâvaṇa	1289	16 0	14 52	—	—	17 8	4·6
1367 Jan. 16 Sat.	Mâgha	1289	18 49	16 59	18 1	19 37	20 39	t.
1367 July 12 Mon.	Âshâḍha I	1290	6 30	4 38	5 38	7 22	8 22	t.
1368 Jan. 5 Wed.	Pausha	1290	19 22	17 49	—	—	20 55	10·0
1368 June 30 Fri.	Âshâḍha	1291	23 42	22 20	—	—	25 4	7·3
1369 Nov. 14 Wed.	Mârgaśîrsha	1292	12 3	11 35	—	—	12 31	0·7
1370 May 11 Sat.	Vaiśâkha II	1293	10 34	8 52	10 12	10 56	12 16	t.
1370 Nov. 4 Mon.	Kârttika	1293	3 0	1 12	2 18	3 42	4 48	t.
1371 Apr. 30 Wed.	Vaiśâkha	1294	11 8	9 23	10 35	11 41	12 53	t.
1371 Oct. 24 Fri.	Kârttika	1294	18 35	16 52	18 7	19 3	20 18	t.
1373 Mar. 9 Wed.	Phâlguna	1295	14 38	13 38	—	—	15 38	3.5
1374 Feb. 27 Mon.	Phâlguna	1296	6 51	5 1	6 2	7 40	8 41	t.
1374 Aug. 22 Tues.	Bhâdrapada	1297	18 38	16 51	17 56	19 20	20 25	t.
1375 Feb. 16 Fri.	Phâlguna	1297	21 43	20 8	—	—	23 18	10·8
1375 Aug. 11 Sat.	Śrâvaṇa II	1298	24 45	23 8	—	—	26 22	11·5
1377 June 21 Sun.	Âshâḍha	1300	23 58	22 26	—	—	25 30	9·6
1377 Dec. 15 Tues.	Pausha	1300	14 34	12 48	13 57	15 11	16 20	t.
1378 June 11 Fri.	Jyeshṭha II	1301	13 51	12 1	13 2	14 40	15 41	t.
1378 Dec. 4 Sat.	Mârgaśîrsha	1301	22 32	20 49	22 5	22 59	24 15	t.
1379 May 31 Tues.	Jyeshṭha	1302	20 51	20 20	—	—	21 22	0·9
1380 Oct. 14 Sun.	Kârttika I	1303	17 22	16 47	—	—	17 57	1·1
1381 Apr. 9 Tues.	Vaiśâkha I	1304	11 31	9 46	10 56	12 6	13 16	t.
1381 Oct. 4 Fri.	Âśvina	1304	3 18	1 31	2 37	3 59	5 5	t.
1382 Mar. 29 Sat.	Chaitra	1305	23 15	21 32	22 48	23 42	24 58	t.
1382 Sept. 23 Tues.	Âśvina	1305	6 11	4 33	—	—	7 49	11·8
1384 Feb. 7 Sun.	Mâgha	1306	19 59	19 0	—	—	20 58	3·4
1384 Aug. 1 Mon.	Śrâvaṇa	1307	23 18	22 19	—	—	24 17	3·4
1385 Jan. 27 Fri.	Mâgha	1307	2 56	1 6	2 9	3 43	4 46	t.
1385 July 22 Sat.	Śrâvaṇa	1308	14 3	12 11	13 12	14 54	15 55	t.
1386 Jan. 16 Tues.	Mâgha	1308	3 17	1 43	—	—	4 51	10·3
1386 July 12 Thur.	Âshâḍha II	1309	7 12	5 42	—	—	8 42	8·9
1387 Nov. 25 Mon.	Mârgaśîrsha	1310	20 46	20 18	—	—	21 14	0·7
1388 May 21 Thur.	Jyeshṭha	1311	17 12	15 35	—	—	18 49	11·3
1388 Nov. 14 Sat.	Mârgaśîrsha	1311	11 45	9 58	11 4	12 26	13 32	t.
1389 May 10 Mon.	Jyeshṭha I	1312	17 44	15 57	17 3	18 25	19 31	t.
1389 Nov. 4 Thur.	Kârttika	1312	3 9	1 25	2 38	3 40	4 53	t.
1390 Apr. 29 Fri.	Vaiśâkha	1313	21 9	20 58	—	—	21 20	0·1
1391 Mar. 20 Mon.	Chaitra	1314	22 48	21 57	—	—	23 39	2·5

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			Greatest phase. [*i.e.* moment of fullmoon]	Beginning of Eclipse.	Period of total obscuration.		End of Eclipse.	
					Beginning.	End.		
			h. m.	h. m.	h. m.	h. m.	h. m.	
1	2		3	4	5	6	7	8
1392 Mar. 9 Sat.	Phâlguna	1314	15 9	13 19	14 22	15 56	16 59	t.
1392 Sept. 1 Sun.	Bhâdrapada	1315	25 43	23 57	25 7	26 19	27 29	t.
1393 Feb. 27 Thur.	Phâlguna	1315	5 58	4 21	—	—	7 35	11·4
1393 Aug. 22 Fri.	Bhâdrapada	1316	8 9	6 28	7 49	8 29	9 50	t.
1395 July 3 Sat.	Âshâḍha	1318	7 22	5 57	—	—	8 47	7·9
1395 Dec. 26 Sun.	Pausha	1318	22 55	21 9	22 19	23 31	24 41	t.
1396 June 21 Wed.	Âshâḍha	1319	20 48	18 57	19 58	21 38	22 39	t.
1396 Dec. 15 Fri.	Pausha	1319	7 15	5 31	6 46	7 44	8 59	t.
1397 June 11 Mon.	Jyeshṭha II	1320	3 29	2 36	—	—	4 22	2·7
1398 Oct. 26 Sat.	Kârttika	1321	1 47	1 24	—	—	2 10	0·5
1399 Apr. 20 Sun.	Vaiśâkha	1322	18 48	17 5	18 22	19 14	20 31	t.
1399 Oct. 15 Wed.	Kârttika I	1322	11 13	9 27	10 35	11 51	12 59	t.
1400 Apr. 9 Fri.	Chaitra II	1323	7 3	5 18	6 29	7 37	8 48	t.
1400 Oct. 3 Sun.	Âśvina	1323	13 37	11 56	13 17	13 57	15 18	t.
1402 Feb. 18 Sat.	Phâlguna	1324	4 10	3 15	—	—	5 5	2·9
1402 Aug. 13 Sun.	Bhâdrapada I,	1325	6 44	5 59	—	—	7 29	1·9
1403 Feb. 7 Wed.	Mâgha	1325	10 58	9 8	10 12	11 44	12 48	t.
1403 Aug. 2 Thur.	Śrâvaṇa	1326	21 36	19 46	20 47	22 25	23 26	t.
1404 Jan. 27 Sun.	Mâgha	1326	11 12	9 37	—	—	12 47	10·7
1404 July 22 Tues.	Śrâvaṇa	1327	14 42	13 8	—	—	16 16	10·4
1405 Dec. 6 Sun.	Mârgaśîrsha	1328	5 31	5 3	—	—	5 59	0·7
1406 June 1 Tues.	Jyeshṭha	1329	23 41	22 10	—	—	25 12	9·5
1406 Nov. 25 Thur.	Mârgaśîrsha	1329	20 30	18 43	19 50	21 10	22 17	t.
1407 May 21 Sat.	Jyeshṭha	1330	24 15	22 25	23 28	25 2	26 5	t.
1407 Nov. 15 Tues.	Mârgaśîrsha	1330	11 45	10 0	11 12	12 18	13 30	t.
1408 May 10 Thur.	Vaiśâkha II	1331	4 9	3 25	—	—	4 53	1·8
1409 Mar. 31 Sun.	Chaitra	1332	6 42	6 0	—	—	7 24	1·6
1410 Mar. 20 Thur.	Chaitra	1333	23 16	21 27	22 31	24 1	25 5	t.
1410 Sept. 13 Sat.	Bhâdrapada II	1333	8 59	7 15	8 30	9 28	10 43	t.
1411 Mar. 10 Tues.	Phâlguna	1333	14 1	12 22	14 1	14 1	15 40	t.
1411 Sept. 2 Wed.	Bhâdrapada	1334	15 44	14 0	15 13	16 15	17 28	t.
1413 July 13 Thur.	Âshâḍha II	1336	14 47	13 30	—	—	16 4	6·2
1414 Jan. 6 Sat.	Pausha	1336	7 14	5 28	6 38	7 50	9 0	t.
1414 July 3 Tues.	Âshâḍha	1337	3 54	2 2	3 2	4 46	5 46	t.
1414 Dec. 26 Wed.	Pausha	1337	15 56	14 12	15 26	16 26	17 40	t.
1415 June 22 Sat.	Âshâḍha	1338	10 0	8 54	—	—	11 6	4·3
1416 Nov. 5 Thur.	Kârttika	1339	10 12	9 54	—	—	10 30	0·3
1417 May 1 Sat.	Vaiśâkha	1340	2 2	0 23	1 55	2 9	3 41	t.
1417 Oct. 25 Mon.	Kârttika	1340	19 11	17 25	18 36	19 46	20 57	t.
1418 Apr. 20 Wed.	Vaiśâkha	1341	14 44	12 57	14 3	15 25	16 31	t.
1418 Oct. 14 Fri.	Kârttika I	1341	21 8	19 25	20 42	21 34	22 51	t.
1419 Apr. 10 Mon.	Chaitra	1342	7 15	6 49	—	—	7 41	0·6
1420 Feb. 29 Thur.	Phâlguna	1342	12 20	11 31	—	—	13 9	2·3
1420 Aug. 23 Fri.	Bhâdrapada	1343	14 17	13 51	—	—	14 43	0·6
1421 Feb. 17 Mon.	Phâlguna	1343	18 46	16 57	18 1	19 31	20 35	t.
1421 Aug. 13 Wed.	Śrâvaṇa II	1344	5 19	3 29	4 33	6 5	7 9	t.
1422 Feb. 6 Fri.	Mâgha	1344	18 57	17 20	—	—	20 34	11·2
1422 Aug. 2 Sun.	Śrâvaṇa	1345	22 13	20 35	—	—	23 51	11.8
1423 Dec. 17 Fri.	Pausha	1346	14 21	13 51	—	—	14 51	0·8
1424 June 12 Mon.	Âshâḍha I	1347	6 6	4 43	—	—	7 29	7·5

TABLE E.

A. D. Year, Month, and Day.	Hindu Month and Current Śaka Year. ["w. m. i." = with mean intercalations.]		Time measured from Laṅka mean sunrise, taken as 6 A. M. Greatest phase. [i.e. moment of fullmoon] h.	m.	Beginning of Eclipse. h.	m.	Period of total obscuration. Beginning. h.	m.	End. h.	m.	End of Eclipse. h.	m.	Number of twelfths eclipsed. ["t." = total eclipse.]
1	2		3		4		5		6		7		8
1424 Dec. 6 Wed.	Mârgaśîrsha	1347	5	23	3	36	4	42	6	4	7	10	t.
1425 June 1 Fri.	Jyeshṭha	1348	6	46	4	55	5	56	7	36	8	37	t.
1425 Nov. 25 Sun.	Mârgaśîrsha	1348	20	26	18	41	19	53	20	59	22	11	t.
1426 May 21 Tues.	Jyeshṭha	1349	11	8	10	8	—		—		12	8	3·5
1427 Apr. 11 Fri.	Vaiśâkha I	1350	14	36	14	13	—		—		14	59	0·5
1428 Mar. 31 Wed.	Chaitra	1351	7	19	5	32	6	38	8	0	9	6	t.
1428 Sept. 23 Thur.	Âśvina	1351	16	26	14	45	16	7	16	45	18	7	t.
1429 Mar. 20 Sun.	Chaitra	1352	21	59	20	17	21	38	22	20	23	41	t.
1429 Sept. 12 Mon.	Bhâdrapada II	1352	23	29	21	43	22	53	24	5	25	15	t.
1430 Sept. 2 Sat.	Bhâdrapada	1353	13	14	13	3	—		—		13	25	0·1
1431 July 24 Tues.	Śrâvaṇa	1354	22	16	21	6	—		—		23	26	4·8
1432 Jan. 17 Thur.	Mâgha	1354	15	28	13	42	14	52	16	4	17	14	t.
1432 July 13 Sun.	Âshâḍha II	1355	10	55	9	3	10	4	11	46	12	47	t.
1433 Jan. 5 Mon.	Pausha	1355	24	39	22	55	24	9	25	9	26	23	t.
1433 July 2 Thur.	Âshâḍha	1356	16	31	15	14	—		—		17	48	6·2
1435 May 12 Thur.	Jyeshṭha I	1358	9	9	7	34	—		—		10	44	10·6
1435 Nov. 6 Sun.	Kârttika	1358	3	14	1	29	2	41	3	47	4	59	t.
1436 Apr. 30 Mon.	Vaiśâkha	1359	22	19	20	30	21	34	23	4	24	8	t.
1436 Oct. 25 Thur.	Kârttika	1359	4	47	3	3	4	16	5	18	6	31	t.
1437 Apr. 20 Sat.	Vaiśâkha	1360	15	7	14	22	—		—		15	52	1·9
1438 Mar. 11 Tues.	Phâlguna	1360	20	14	19	35	—		—		20	53	1·4
1439 Mar. 1 Sun.	Phâlguna	1361	2	23	0	35	1	41	3	5	4	11	t.
1439 Aug. 24 Mon.	Bhâdrapada	1362	13	8	11	20	12	26	13	50	14	56	t.
1440 Feb. 18 Thur.	Phâlguna	1362	2	33	0	55	—		—		4	11	11·7
1440 Aug. 13 Sat.	Śravaṇa II	1363	5	55	4	13	5	33	6	17	7	37	t.
1441 Dec. 27 Wed.	Pausha	1364	23	7	22	41	—		—		23	33	0·6
1442 June 23 Sat.	Âshâḍha	1365	12	35	11	21	—		—		13	49	5·7
1442 Dec. 17 Mon.	Pausha	1365	14	21	12	34	13	41	15	1	16	8	t.
1443 June 12 Wed.	Âshâḍha I	1366	13	15	11	23	12	23	14	7	15	7	t.
1443 Dec. 7 Sat.	Mârgaśîrsha	1366	5	13	3	28	4	40	5	46	6	58	t.
1444 May 31 Sun.	Jyeshṭha	1367	18	3	16	51	—		—		19	15	5·2
1446 Apr. 11 Mon.	Vaiśâkha I	1369	15	14	13	28	14	38	15	50	17	0	t.
1446 Oct. 4 Tues.	Âśvina	1369	24	2	22	23	23	55	24	9	25	41	t.
1447 Apr. 1 Sat.	Chaitra	1370	5	46	4	2	5	16	6	16	7	30	t.
1447 Sept. 24 Sun.	Âśvina	1370	7	20	5	33	6	39	8	1	9	7	t.
1448 Sept. 12 Thur.	Bhâdrapada II	1371	21	14	20	38	—		—		21	50	1·2
1449 Aug. 4 Mon.	Śrâvaṇa	1372	5	45	4	46	—		—		6	44	3.4
1450 Jan. 27 Tues.	Mâgha	1372	23	41	21	56	23	6	24	16	25	26	t.
1450 July 24 Fri.	Śrâvaṇa	1373	17	57	16	7	17	8	18	46	19	47	t.
1451 Jan. 17 Sun.	Mâgha	1373	9	16	7	32	8	44	9	48	11	0	t.
1451 July 13 Tues.	Âshâḍha II	1374	23	4	21	38	—		—		24	30	8·0
1453 May 22 Tues.	Jyeshṭha	1376	16	17	14	47	—		—		17	47	9·0
1453 Nov. 16 Fri.	Mârgaśîrsha	1376	11	27	9	43	10	55	11	59	13	11	t.
1454 May 12 Sun.	Jyeshṭha I	1377	5	50	4	0	5	1	6	39	7	40	t.
1454 Nov. 5 Tues.	Kârttika	1377	12	33	10	48	11	59	13	7	14	18	t.
1455 May 1 Thur.	Vaiśâkha	1378	22	48	21	51	—		—		23	45	3·1
1456 Mar. 22 Mon.	Chaitra	1379	4	2	3	44	—		—		4	20	0·3
1457 Mar. 11 Fri.	Phâlguna	1379	9	55	8	9	9	17	10	33	11	41	t.
1457 Sept. 3 Sat.	Bhâdrapada	1380	21	9	19	23	20	32	21	46	22	55	t.
1458 Feb. 28 Tues.	Phâlguna	1380	10	3	8	23	9	47	10	19	11	43	t.

TABLE E.

A. D. Year, Month, and Day.	Hindu Month and Current Śaka Year. ["*w.m.i.*" = with mean intercalations.]	Time measured from Laṅka mean sunrise, taken as 5 A. M. Greatest phase. [*i.e.* moment of fullmoon]	Beginning of Eclipse.	Period of total obscuration. Beginning.	Period of total obscuration. End.	End of Eclipse.	Number of twelfths eclipsed. ["*t.*" = total eclipse.]
		h. m.	h. m.	h. m.	h. m.	h. m.	
1	2	3	4	5	6	7	8
1458 Aug. 24 Thur.	Bhâdrapada 1381	13 43	11 58	13 10	14 16	15 28	t.
1460 Jan. 8 Tues.	Pausha 1382	7 52	7 24	—	—	8 20	0·7
1460 July 3 Thur.	Âshâḍha 1383	19 1	18 0	—	—	20 2	3·6
1460 Dec. 27 Sat.	Pausha 1383	23 11	21 24	22 32	23 50	24 58	t.
1461 June 22 Mon.	Âshâḍha 1384	19 42	17 51	18 52	20 32	21 33	t.
1461 Dec. 17 Thur.	Pausha 1384	13 56	12 11	13 22	14 30	15 41	t.
1462 June 11 Fri.	Âshâḍha I. 1385	24 58	23 38	—	—	26 18	6·9
1464 Apr. 21 Sat.	Vaiśâkha 1387	22 58	21 14	22 29	23 27	24 42	t.
1464 Oct. 15 Mon.	Kârttika 1387	7 47	6 10	—	—	9 24	11·5
1465 Apr. 11 Thur.	Chaitra II. 1388	13 24	11 38	12 48	14 0	15 10	t.
1465 Oct. 4 Fri.	Âśvina 1388	15 21	13 33	14 38	16 4	17 9	t.
1466 Sept. 24 Wed.	Âśvina 1389	5 21	4 34	—	—	6 8	2·1
1467 Aug. 15 Sat.	Bhâdrapada I. 1390	13 17	12 34	—	—	14 0	1·7
1468 Feb. 8 Mon.	Mâgha 1390	7 51	6 7	7 19	8 23	9 35	t.
1468 Aug. 3 Wed.	Śrâvaṇa 1391	25 5	23 16	24 20	25 50	26 54	t.
1469 Jan. 27 Fri.	Mâgha 1391	17 52	16 7	17 18	18 26	19 37	t.
1469 July 24 Mon.	Śrâvaṇa 1392	5 39	4 7	—	—	7 11	9·7
1470 Jan. 17 Wed.	Mâgha 1392	8 50	8 39	—	—	9 1	0·1
1471 June 2 Sun.	Jyeshṭha 1394	23 24	22 1	—	—	24 47	7·5
1471 Nov. 27 Wed.	Mârgaśîrsha 1394	19 36	17 52	19 5	20 7	21 20	t.
1472 May 22 Fri.	Jyeshṭha 1395	13 20	11 28	12 29	14 11	15 12	t.
1472 Nov. 15 Sun.	Mârgaśîrsha 1395	20 26	18 41	19 51	21 1	22 11	t.
1473 May 12 Wed.	Jyeshṭha I. 1396	6 26	5 17	—	—	7 35	4·7
1473 Nov. 4 Thur.	Kârttika 1396	20 7	19 56	—	—	20 18	0 1
1475 Mar. 22 Wed.	Chaitra 1398	17 17	15 32	16 44	17 50	19 2	t.
1475 Sept. 15 Fri.	Âśvina I. 1398	5 9	3 24	4 36	5 42	6 54	t.
1476 Mar. 10 Sun.	Phâlguna 1398	17 27	15 44	17 0	17 54	19 10	t.
1476 Sept. 3 Tues.	Bhâdrapada 1399	21 36	19 50	20 58	22 14	23 22	t.
1478 Jan. 18 Sun.	Mâgha 1400	16 32	16 9	—	—	16 55	0·5
1478 July 15 Wed.	Śrâvaṇa I. 1401	1 28	0 43	—	—	2 13	1·9
1479 Jan. 8 Fri.	Pausha 1401	8 3	6 16	7 24	8 42	9 50	t.
1479 July 4 Sun.	Âshâḍha 1402	2 14	0 24	1 26	3 2	4 4	t.
1479 Dec. 28 Tues.	Pausha 1402	22 44	20 59	22 11	23 17	24 29	t.
1480 June 22 Thur.	Âshâḍha 1403	7 51	6 21	—	—	9 21	8·9
1482 May 3 Fri.	Vaiśâkha 1405	6 36	4 56	6 22	6 50	8 16	t.
1482 Oct. 26 Sat.	Kârttika 1405	15 44	14 8	—	—	17 20	11·1
1483 Apr. 22 Tues.	Vaiśâkha 1406	20 49	19 1	20 7	21 31	22 37	t.
1483 Oct. 15 Wed.	Kârttika 1406	23 35	21 46	22 50	24 20	25 24	t.
1484 Oct. 4 Mon.	Âśvina 1407	13 42	12 49	—	—	14 35	2·7
1485 Aug. 25 Thur.	Bhâdrapada 1408	21 4	20 38	—	—	21 30	0·6
1486 Feb. 18 Sat.	Phâlguna 1408	15 50	14 6	15 20	16 20	17 34	t.
1486 Aug. 15 Tues.	Śrâvaṇa II. 1409	8 15	6 28	7 34	8 56	10 2	t.
1487 Feb. 8 Thur.	Mâgha 1409	2 21	0 35	1 46	2 56	4 7	t.
1487 Aug. 4 Sat.	Śrâvaṇa 1410	12 23	10 46	—	—	14 0	11·3
1488 Jan. 28 Mon.	Mâgha 1410	17 35	17 9	—	—	18 1	0·6
1489 June 13 Sat.	Âshâḍha I. 1412	6 26	5 11	—	—	7 41	5·9
1489 Dec. 8 Tues.	Mârgaśîrsha 1412	3 54	2 11	3 26	4 22	5 37	t.
1490 June 2 Wed.	Jyeshṭha 1413	20 49	18 57	19 57	21 41	22 41	t.
1490 Nov. 27 Sat.	Mârgaśîrsha 1413	4 25	2 39	3 49	5 1	6 11	t.
1491 May 23 Mon.	Jyeshṭha 1414	13 56	12 40	—	—	15 12	6·0

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A. D. Year, Month, and Day.	Hindu Month and Current Śaka Year. ["*w. m. i.*" = with mean intercalations.]		Time measured from Laṅka mean sunrise, taken as 6 A. M. Greatest phase. [*i. e.* moment of fullmoon]		Beginning of Eclipse.		Period of total obscuration. Beginning.		Period of total obscuration. End.		End of Eclipse.		Number of twelfths eclipsed. ["*t.*" = total eclipse.]
			h.	m.	h.	m.	h.	m.	h.	m.	h.	m.	
1	2		3		4		5		6		7		8
1491 Nov. 16 Wed.	Mârgaśîrsha	1414	4	9	3	46	—		—		4	32	0 5
1493 Apr. 1 Mon.	Chaitra	1416	24	28	22	46	24	4	24	52	26	10	t.
1493 Sept. 25 Wed.	Âśvina	1416	13	19	11	36	12	52	13	46	15	2	t.
1494 Mar. 21 Fri.	Chaitra	1417	24	35	22	50	25	1	25	9	26	20	t.
1494 Sept. 15 Mon.	Bhâdrapada II	1417	5	31	3	44	4	49	6	13	7	18	t.
1496 Jan. 30 Sat.	Mâgha	1418	1	13	0	50	—		—		1	36	0·5
1497 Jan. 18 Wed.	Mâgha	1419	16	53	15	7	16	16	17	30	18	39	t.
1497 July 14 Fri.	Śrâvaṇa I	1420	8	45	6	56	8	2	9	28	10	34	t.
1498 Jan. 8 Mon.	Pausha	1420	7	25	5	40	6	51	7	59	9	10	t.
1498 July 3 Tues.	Âshâḍha	1421	14	55	13	20	—		—		16	30	10·6
1500 May 13 Wed.	Jyeshṭha I	1423	14	13	12	38	—		—		15	48	10·8
1500 Nov. 5 Thur.	Kârttika	1423	23	48	22	13	—		—		25	23	10·7
1501 May 3 Mon.	Vaiśâkha	1424	4	13	2	23	3	27	4	59	6	3	t.
1501 Oct. 26 Tues.	Kârttika	1424	7	53	6	3	7	6	8	40	9	43	t.
1502 Oct. 15 Sat.	Kârttika	1425	22	7	21	9	—		—		23	5	3·2
1504 Feb. 29 Thur.	Phâlguna	1426	23	42	21	59	23	17	24	7	25	25	t.
1504 Aug. 25 Sun.	Bhâdrapada	1427	15	28	13	43	14	54	16	2	17	13	t.
1505 Feb. 18 Tues.	Phâlguna	1427	10	44	8	58	10	6	11	22	12	30	t.
1505 Aug. 14 Thur.	Śrâvaṇa II	1428	19	5	17	23	18	43	19	27	20	47	t.
1506 Feb. 8 Sun.	Mâgha	1428	2	10	1	40	—		—		2	40	0·8
1507 June 24 Thur.	Âshâḍha	1430	13	33	12	26	—		—		14	40	4·4
1507 Dec. 19 Sun.	Pausha	1430	12	11	10	28	11	45	12	37	13	54	t.
1508 June 13 Tues.	Âshâḍha I	1431	4	14	2	22	3	22	5	6	6	6	t.
1508 Dec. 7 Thur.	Mârgaśîrsha	1431	12	24	10	38	11	47	13	1	14	10	t.
1509 June 2 Sat.	Jyeshṭha	1432	21	26	20	2	—		—		22	50	7·7
1509 Nov. 26 Mon.	Mârgaśîrsha	1432	12	17	11	51	—		—		12	43	0·6
1511 Apr. 13 Sun.	Vaiśâkha I	1434	7	25	5	47	—		—		9	3	11·8
1511 Oct. 6 Mon.	Âśvina	1434	21	44	20	2	21	22	22	6	23	26	t.
1512 Apr. 1 Thur.	Chaitra	1435	7	41	5	54	7	1	8	21	9	28	t.
1512 Sept. 25 Sat.	Âśvina	1435	13	35	11	46	12	51	14	19	15	24	t.
1513 Mar. 21 Mon.	Chaitra	1436	10	25	10	7	—		—		10	43	0·3
1513 Sept. 15 Thur.	Bhâdrapada II	1436	1	29	1	18	—		—		1	40	0·1
1514 Feb. 9 Thur.	Mâgha	1436	9	45	9	30	—		—		10	0	0·2
1515 Jan. 29 Mon.	Mâgha	1437	25	36	23	50	25	0	26	12	27	22	t.
1515 July 25 Wed.	Śrâvaṇa	1438	15	28	13	42	14	52	16	4	17	14	t.
1516 Jan. 19 Sat.	Mâgha	1438	16	1	14	16	15	26	16	36	17	46	t.
1516 July 13 Sun.	Śrâvaṇa I	1439	21	57	20	17	21	43	22	11	23	37	t.
1518 May 24 Mon.	Jyeshṭha	1441	21	42	20	11	—		—		23	13	9·2
1518 Nov. 17 Wed.	Mârgaśirsha	1441	7	58	6	23	—		—		9	33	10·6
1519 May 14 Sat.	Jyeshṭha I	1442	11	28	9	38	10	39	12	17	13	18	t.
1519 Nov. 6 Sun.	Kârttika	1442	16	20	14	30	15	33	17	7	18	10	t.
1520 May 2 Wed.	Vaiśâkha	1443	18	14	17	35	—		—		18	53	1·4
1520 Oct. 26 Fri.	Kârttika	1443	6	41	5	39	—		—		7	43	3·8
1522 Mar. 12 Wed.	Chaitra	1445	7	30	5	50	7	14	7	46	9	10	t.
1522 Sept. 5 Fri.	Bhâdrapada	1445	22	49	21	6	22	24	23	14	24	32	t.
1523 Mar. 1 Sun.	Phâlguna	1445	19	1	17	14	18	20	19	42	20	48	t.
1523 Aug. 26 Wed.	Bhâdrapada	1446	1	56	0	11	1	23	2	29	3	41	t.
1524 Feb. 19 Fri.	Phâlguna	1446	10	41	10	3	—		—		11	19	1·3
1525 July 4 Tues.	Âshâḍha	1448	20	42	19	49	—		—		21	35	2·7
1525 Dec. 29 Fri.	Pausha	1448	20	23	18	41	19	59	20	47	22	5	t.

TABLE E.

A. D. Year, Month, and Day.	Hindu Month and Current Śaka Year. ["*w.m.i.*" = with mean intercalations.]	Time measured from Laṅka mean sunrise, taken as 5 A. M. — Greatest phase. [*i.e.* moment of fullmoon] h. m.	Beginning of Eclipse. h. m.	Period of total obscuration. Beginning. h. m.	Period of total obscuration. End. h. m.	End of Eclipse. h. m.	Number of twelfths eclipsed. ["*t.*" = total eclipse.]
1	2	3	4	5	6	7	8
1526 June 24 Sun.	Âshâḍha 1449	11 39	9 48	10 49	12 29	13 30	t.
1526 Dec. 18 Tues.	Pausha 1449	20 27	18 41	19 49	21 5	22 13	t.
1527 June 14 Fri.	Âshâḍha I 1450	4 55	3 25	—	—	6 25	9·1
1527 Dec. 7 Sat.	Mârgaśirsha 1450	20 32	20 1	—	—	21 3	0·9
1529 Apr. 23 Fri.	Vaiśâkha 1452	14 21	12 47	—	—	15 55	10·4
1529 Oct. 17 Sun.	Kârttika 1452	6 11	4 31	5 59	6 23	7 51	t.
1530 Apr. 12 Tues.	Vaiśâkha I 1453	14 36	12 47	13 51	15 21	16 25	t.
1530 Oct. 6 Thur.	Âśvina 1453	21 49	19 59	21 3	22 35	23 39	t.
1531 Apr. 1 Sat.	Chaitra 1454	17 49	17 7	—	—	18 31	1·6
1531 Sept. 26 Tues.	Âśvina 1454	9 10	8 40	—	—	9 40	0·8
1533 Feb. 9 Sun.	Mâgha 1455	10 15	8 30	9 40	10 50	12 0	t.
1533 Aug. 4 Mon.	Śrâvaṇa 1456	22 17	20 34	21 51	22 43	24 0	t.
1534 Jan. 29 Thur.	Mâgha 1456	24 36	22 50	24 0	25 12	26 22	t.
1534 July 25 Sat.	Śrâvaṇa 1457	5 9	3 25	4 39	5 39	6 53	t.
1536 June 4 Sun.	Jyeshṭha 1459	5 10	3 46	—	—	6 34	7·7
1536 Nov. 27 Mon.	Mârgaśirsha 1459	16 13	14 39	—	—	17 47	10·4
1537 May 24 Thur.	Jyeshṭha 1460	18 32	16 40	17 41	19 23	20 24	t.
1537 Nov. 16 Fri.	Mârgaśirsha 1460	24 53	23 3	24 5	25 41	26 43	t.
1538 May 14 Tues.	Jyeshṭha I 1461	0 59	0 3	—	—	1 55	3·0
1538 Nov. 6 Wed.	Kârttika 1461	15 18	14 15	—	—	16 21	3·9
1540 Mar. 22 Mon.	Chaitra 1463	15 13	13 35	—	—	16 51	11·8
1540 Sept. 16 Thur.	Âśvina I 1463	6 17	4 37	6 3	6 31	7 57	t.
1541 Mar. 12 Sat.	Chaitra I 1464	3 10	1 21	2 27	3 53	4 59	t.
1541 Sept. 5 Mon.	Bhâdrapada 1464	8 57	7 10	8 18	9 36	10 44	t.
1542 Mar. 1 Wed.	Phâlguna 1464	19 10	18 27	—	—	19 53	1·7
1543 July 16 Mon.	Śrâvaṇa I 1466	3 57	3 22	—	—	4 32	1·1
1544 Jan. 10 Thur.	Pausha 1466	4 38	2 56	4 16	5 0	6 20	t.
1544 July 4 Fri.	Âshâḍha 1467	19 5	17 15	18 17	19 53	20 55	t.
1544 Dec. 29 Mon.	Pausha 1467	4 31	2 44	3 52	5 10	6 18	t.
1545 June 24 Wed.	Âshâḍha 1468	12 19	10 44	—	—	13 54	10·8
1545 Dec. 18 Fri.	Pausha 1468	4 45	4 10	—	—	5 20	1·1
1547 May 4 Wed.	Vaiśâkha 1470	21 2	19 32	—	—	22 32	8·9
1547 Oct. 28 Fri.	Kârttika 1470	14 43	13 4	14 43	14 43	16 22	t.
1548 Apr. 22 Sun.	Vaiśâkha 1471	21 25	19 35	20 37	22 13	23 15	t.
1548 Oct. 17 Wed.	Kârttika 1471	6 6	4 16	5 18	6 54	7 56	t.
1549 Apr. 12 Fri.	Vaiśâkha I 1472	1 8	0 13	—	—	2 3	2·9
1549 Oct. 6 Sun.	Âśvina 1472	17 3	16 21	—	—	17 45	1·6
1551 Feb. 20 Fri.	Phâlguna 1473	18 42	16 57	18 9	19 15	20 27	t.
1551 Aug. 16 Sun.	Bhâdrapada I 1474	5 9	3 30	5 9	5 9	6 48	t.
1552 Feb. 10 Wed.	Mâgha 1474	8 59	7 13	8 23	9 35	10 45	t.
1552 Aug. 4 Thur.	Śrâvaṇa 1475	12 23	10 36	11 44	13 2	14 10	t.
1554 June 15 Fri.	Âshâḍha I 1477	12 30	11 15	—	—	13 45	5·9
1554 Dec. 8 Sat.	Mârgaśirsha 1477	24 33	23 0	—	—	26 6	10·1
1555 June 4 Tues.	Jyeshṭha 1478	25 36	23 44	24 44	26 28	27 28	t.
1555 Nov. 28 Thur.	Mârgaśirsha 1478	9 33	7 43	8 45	10 21	11 23	t.
1556 May 24 Sun.	Jyeshṭha 1479	7 37	6 29	—	—	8 45	4·6
1556 Nov. 16 Mon.	Mârgaśirsha 1479	24 6	23 1	—	—	25 11	4·2
1558 Apr. 2 Sat.	Chaitra 1481	22 45	21 10	—	—	24 20	10·8
1558 Sept. 27 Tues.	Âśvina 1481	13 54	12 17	—	—	15 31	11·3
1559 Mar. 23 Thur.	Chaitra 1482	11 16	9 26	10 30	12 2	13 6	t.

TABLE E.

A. D. Year, Month, and Day.	Hindu Month and Current Śaka Year. ["w. m. i." = with mean intercalations.]		Time measured from Laṅka mean sunrise, taken as 6 A. M.					Number of twelfths eclipsed. ["t." = total eclipse.]
			Greatest phase. [i. e. moment of fullmoon]	Beginning of Eclipse.	Period of total obscuration. Beginning.	Period of total obscuration. End.	End of Eclipse.	
			h. m.	h. m.	h. m.	h. m.	h. m.	
1	2		3	4	5	6	7	8
1559 Sept. 16 Sat.	Âśvina I	1482	16 2	14 13	15 19	16 45	17 51	t.
1560 Mar. 12 Tues.	Phâlguna	1482	3 26	2 35	—	—	4 17	2·5
1560 Sept. 4 Wed.	Bhâdrapada	1483	16 11	15 36	—	—	16 46	1·1
1562 Jan. 20 Tues.	Mâgha	1484	12 42	11 1	12 22	13 2	14 23	t.
1562 July 16 Thur.	Srâvaṇa I	1485	2 38	0 49	1 54	3 22	4 27	t.
1563 Jan. 9 Sat.	Pausha	1485	12 27	10 40	11 47	13 7	14 14	t.
1563 July 5 Mon.	Âshâḍha	1486	19 45	18 5	19 29	20 1	21 25	t.
1563 Dec. 29 Wed.	Pausha	1486	12 59	12 21	—	—	13 37	1·3
1565 May 15 Tues.	Jyeshṭha	1488	3 38	2 16	—	—	5 0	7·2
1565 Nov. 7 Wed.	Kârttika	1488	23 24	21 47	—	—	25 1	11·4
1566 May 4 Sat.	Vaiśâkha	1489	4 7	2 16	3 17	4 57	5 58	t.
1566 Oct. 28 Mon.	Kârttika	1489	14 32	12 42	13 44	15 20	16 22	t.
1567 Apr. 23 Wed.	Vaiśâkha	1490	8 19	7 14	—	—	9 24	4·1
1567 Oct. 18 Sat.	Kârttika	1490	0 59	0 14	—	—	1 44	1·9
1569 Mar. 3 Thur.	Phâlguna	1491	3 8	1 24	2 39	3 37	4 52	t.
1569 Aug. 26 Fri.	Bhâdrapada	1492	12 11	10 36	—	—	13 46	10·6
1570 Feb. 20 Mon.	Phâlguna	1492	17 16	15 29	16 37	17 55	19 3	t.
1570 Aug. 15 Tues.	Bhâdrapada I	1493	19 48	17 59	19 4	20 32	21 37	t.
1571 Aug. 5 Sun.	Srâvaṇa	1494	9 56	9 16	—	—	10 36	1·5
1572 June 25 Wed.	Âshâḍha	1495	19 54	18 47	—	—	21 1	4·4
1572 Dec. 19 Fri.	Pausha	1495	8 58	7 25	—	—	10 31	10·1
1573 June 15 Mon.	Âshâḍha I	1496	8 35	6 44	7 45	9 25	10 26	t.
1573 Dec. 8 Tues.	Mârgaśirsha	1496	18 16	16 26	17 28	19 4	20 6	t.
1574 June 4 Fri.	Jyeshṭha	1497	14 12	12 53	—	—	15 31	6·7
1574 Nov. 28 Sun.	Mârgaśirsha	1497	8 54	7 47	—	—	10 1	4·4
1576 Apr. 13 Fri.	Vaiśâkha	1499	6 12	4 40	—	—	7 44	9·6
1576 Oct. 7 Sun.	Âśvina	1499	21 35	20 0	—	—	23 10	10·6
1577 Apr. 2 Tues.	Chaitra	1500	19 11	17 21	18 22	20 0	21 1	t.
1577 Sept. 26 Thur.	Âśvina	1500	23 17	21 27	22 31	24 3	25 7	t.
1578 Mar. 23 Sun.	Chaitra	1501	11 36	10 38	—	—	12 34	3·3
1578 Sept. 15 Mon.	Âśvina I	1501	23 24	22 35	—	—	24 13	2·3
1580 Jan. 31 Sun.	Mâgha	1502	20 40	19 0	20 24	20 56	22 20	t.
1580 July 26 Tues.	Srâvaṇa	1503	10 9	8 23	9 31	10 47	11 55	t.
1581 Jan. 19 Thur.	Mâgha	1503	20 24	18 37	19 43	21 5	22 11	t.
1581 July 16 Sun.	Srâvaṇa I	1504	3 12	1 28	2 42	3 42	4 56	t.
1582 Jan. 8 Mon.	Pausha	1504	21 13	20 33	—	—	21 53	1·5
1583 May 26*Sun.	Jyeshṭha	1506	10 13	9 2	—	—	11 24	5·1
1583 Nov. 19 Tues.	Mârgaśirsha	1506	8 9	6 32	—	—	9 46	11·2
1584 May 14 Thur.	Jyeshṭha	1507	10 43	8 51	9 51	11 35	12 35	t.
1584 Nov. 7 Sat.	Kârttika	1507	23 2	21 12	22 13	23 51	24 52	t.
1585 May 3 Mon.	Vaiśâkha	1508	15 25	14 11	—	—	16 39	5·7
1585 Oct. 28 Thur.	Kârttika	1508	9 5	8 16	—	—	9 54	2·3
1587 Mar. 14 Tues.	Chaitra	1510	11 23	9 41	11 1	11 45	13 5	t.
1587 Sept. 6 Wed.	Bhâdrapada	1510	19 25	17 54	—	—	20 56	9·4
1588 Mar. 2 Sat.	Phâlguna	1510	25 27	23 39	24 45	26 9	27 15	t.
1588 Aug. 26 Mon.	Bhâdrapada	1511	3 15	1 25	2 28	4 2	5 5	t.
1589 Aug. 15 Fri.	Bhâdrapada I	1512	17 38	16 43	—	—	18 33	2·9
1590 July 7 Tues.	Âshâḍha	1513	3 12	2 20	—	—	4 4	2·6
1590 Dec. 30 Wed.	Pausha	1513	17 17	15 44	—	—	18 50	9·9
1591 June 26 Sat.	Âshaḍha	1514	15 32	13 42	14 44	16 20	17 22	t.

* *Old and New Style.* Pope Gregory XIII reformed the Julian Calendar, deducting 10 days after October 4th A. D. 1582, so that October 5th was styled October 15th. The reform was adopted in France, Denmark, Holland, Italy, Lorraine, Portugal, and Spain in that year, though some countries deducted the ten days from the month of December. The Roman Catholics in Germany and Switzerland introduced it in A. D. 1584. The Protestants in the two latter countries made the change in A. D. 1700. Poland adopted it in A. D. 1586, Hungary in 1587. England adopted it in A. D. 1752, after September 2nd, calling what would have been Sept. 3rd "Sept. 14th." Tuscany introduced the change in 1751, and Sweden in 1753. Russia and Greece have never accepted the reform. The present tables having been prepared according to English computation the dates are given in Old Style till A. D. 1752, differing thus from von Oppolzer, who calculates by New Style from A. D. 1582.

TABLE E.

A. D. Year, Month, and Day.	Hindu Month and Current Śaka Year. ["*w. m. i.*" = with mean intercalations.]		Time measured from Laṅka mean sunrise, taken as 6 A. M. Greatest phase. [*i.e.* moment of full moon] h. m.	Beginning of Eclipse. h. m.	Period of total obscuration. Beginning. h. m.	Period of total obscuration. End. h. m.	End of Eclipse. h. m.	Number of twelfths eclipsed. ["t." = total eclipse.]
1	2		3	4	5	6	7	8
1591 Dec. 20 Mon.	Pausha	1514	3 3	1 13	2 14	3 52	4 53	t.
1592 June 14 Wed.	Âshâḍha I	1515	20 41	19 13	—	—	22 9	8·5
1592 Dec. 8 Fri.	Mârgaśîrsha	1515	17 42	16 35	—	—	18 49	4·5
1594 Apr. 24 Wed.	Vaiśâkha	1517	13 36	12 8	—	—	15 4	8·4
1594 Oct. 19 Sat.	Kârttika	1517	5 22	3 49	—	—	6 55	9·9
1595 Apr. 14 Mon.	Vaiśâkha	1518	2 59	1 8	2 9	3 49	4 50	t.
1595 Oct. 8 Wed.	Âśvina	1518	6 40	4 50	5 52	7 28	8 30	t.
1596 Apr. 2 Fri.	Chaitra	1519	19 35	18 28	—	—	20 42	4·4
1596 Sept. 26 Sun.	Âśvina	1519	6 46	5 49	—	—	7 43	3·1
1598 Feb. 11 Sat.	Mâgha	1520	4 32	2 54	—	—	6 10	11·8
1598 Aug. 6 Sun.	Śrâvaṇa	1521	17 50	16 6	17 19	18 21	19 34	t.
1599 Jan. 31 Wed.	Mâgha	1521	4 14	2 26	3 32	4 56	6 2	t.
1599 July 27 Fri.	Srâvaṇa	1522	10 42	8 56	10 4	11 20	12 28	t.
1600 Jan. 20 Sun.	Mâgha	1522	5 27	4 43	—	—	6 11	1·8
1601 June 5 Fri.	Jyeshṭha	1524	16 39	15 41	—	—	17 37	3·3
1601 Nov. 29 Sun.	Mârgaśîrsha	1524	17 0	15 24	—	—	18 36	11·1
1602 May 25 Tues.	Jyeshṭha	1525	17 21	15 30	16 31	18 11	19 12	t.
1602 Nov. 19 Fri.	Mârgaśîrsha	1525	7 40	5 50	6 51	8 29	9 30	t.
1603 May 14 Sat.	Jyeshṭha	1526	22 33	21 10	—	—	23 56	7·4
1603 Nov, 8 Tues.	Kârttika	1526	17 11	16 19	—	—	18 3	2.6
1605 Mar. 24 Sun.	Chaitra	1528	19 27	17 47	19 17	19 37	21 7	t.
1605 Sept. 17 Tues.	Âśvina	1528	2 45	1 17	—	—	4 13	8·4
1606 Mar. 14 Fri.	Chaitra I	1529	9 24	7 35	8 40	10 8	11 13	t.
1606 Sept. 6 Sat.	Bhâdrapada	1529	10 57	9 6	10 7	11 47	12 48	t.
1607 Aug. 27 Thur.	Bhâdrapada	1530	1 30	0 26	—	—	2 34	4·0
1608 July 17 Sun,	Śrâvaṇa	1531	10 34	10 3	—	—	11 5	0·9
1609 Jan. 10 Tues.	Pausha	1531	1 42	0 10	—	—	3 14	9·8
1609 July 6 Thur.	Âshâḍha	1532	22 26	20 37	21 43	23 9	24 15	t.
1609 Dec. 30 Sat.	Pausha	1532	11 46	9 56	10 57	12 35	13 36	t.
1610 June 26 Tues.	Âshâḍha	1533	3 10	1 36	—	—	4 44	10·2
1610 Dec. 20 Thur.	Pausha	1533	2 42	1 33	—	—	3 51	4·7
1612 May 4 Mon.	Vaiśâkha	1535	20 51	19 30	—	—	22 12	7·0
1612 Oct. 29 Thur.	Kârttika	1535	13 20	11 50	—	—	14 50	9·1
1613 Apr. 24 Sat.	Vaiśâkha	1536	10 43	8 51	9 52	11 34	12 35	t.
1613 Oct. 18 Mon.	Kârttika	1536	14 10	12 20	13 21	14 59	16 0	t.
1614 Apr. 14 Thur.	Vaiśâkha	1537	3 30	2 17	-	—	4 43	5·4
1614 Oct, 7 Fri.	Âśvina	1537	14 21	13 17	—	—	15 25	4·0
1616 Feb. 22 Thur.	Phâlguna	1538	12 16	10 39	—	—	13 53	11·3
1616 Aug, 16 Fri.	Bhâdrapada	1539	25 37	23 56	25 17	25 57	27 18	t.
1617 Feb. 10 Mon.	Mâgha	1539	11 59	10 10	11 15	12 43	13 48	t.
1617 Aug. 6 Wed.	Śrâvana	1540	18 16	16 27	17 32	19 0	20 5	t.
1618 Jan. 30 Fri.	Mâgha	1540	13 35	12 47	—	—	14 23	2·2
1619 June 16 Wed.	Âshâḍha	1542	23 4	22 25	—	—	23 43	1·4
1619 Dec. 11 Sat.	Mârgaśîrsha	1542	1 51	0 15	—	—	3 27	10·9
1620 June 4 Sun.	Jyeshṭha	1543	23 53	22 3	23 5	24 41	25 43	t.
1620 Nov. 29 Wed.	Mârgaśîrsha	1543	16 20	14 30	15 31	17 9	18 10	t.
1621 May 25 Fri.	Jyeshṭha	1544	5 34	4 3	—	—	7 5	9·4
1621 Nov. 19 Mon.	Mârgaśîrsha	1544	1 23	0 28	—	—	2 18	2·9
1623 Apr. 5 Sat.	Chaitra	1546	3 25	1 49	—	—	5 1	10·9
1623 Sept. 28 Sun.	Âśvina	1546	10 20	8 57	—	—	11 43	7·4

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A. D. Year, Month, and Day.	Hindu Month and Current Śaka Year. ["*w. m. i.*" = with mean intercalations.]		Time measured from Laṅka mean sunrise, taken as 6 A. M. Greatest phase. [*i.e.* moment of full moon] h. m.	Beginning of Eclipse. h. m.	Period of total obscuration. Beginning. h. m.	Period of total obscuration. End. h. m.	End of Eclipse. h. m.	Number of twelfths eclipsed. ["*t.*" = total eclipse.]
1	2		3	4	5	6	7	8
1624 Mar. 24 Wed.	Chaitra	1547	17 12	15 22	16 25	17 59	19 2	t.
1624 Sept. 16 Thur.	Âśvina	1547	18 43	16 51	17 52	19 34	20 35	t.
1625 Mar, 13 Sun.	Chaitra I	1548	24 12	23 46	—	—	24 38	0·6
1625 Sept. 6 Tues.	Bhâdrapada	1548	9 26	8 14	—	—	10 38	5·3
1627 Jan. 21 Sun.	Mâgha	1549	9 59	8 26	—	—	11 32	10·0
1627 July 18 Wed.	Srâvaṇa I	1550	5 22	3 36	4 46	5 58	7 8	t.
1628 Jan. 10 Thur.	Pausha	1550	20 31	18 41	19 42	21 20	22 21	t.
1628 July 6 Sun.	Âshâḍha	1551	9 40	8 0	9 30	9 50	11 20	t.
1628 Dec. 30 Tues.	Pausha	1551	11 32	10 23	—	—	12 41	4·7
1630 May 16 Sun.	Jyeshṭha	1553	4 3	2 51	—	—	5 15	5·3
1630 Nov. 9 Tues.	Kârttika	1553	21 21	19 53	—	—	22 49	8·5
1631 May 5 Thur.	Vaiśâkha	1554	18 17	16 25	17 25	19 9	20 9	t.
1631 Oct. 29 Sat.	Kârttika	1554	21 55	20 4	21 5	22 45	23 46	t.
1632 Apr. 24 Tues.	Vaiśâkha	1555	11 16	9 56	—	—	12 36	6·8
1632 Oct. 17 Wed.	Kârttika	1555	22 4	20 54	—	—	23 14	4·8
1634 Mar. 4 Tues.	Phâlguna	1556	19 55	18 20	—	—	21 30	10·6
1634 Aug. 28 Thur.	Bhâdrapada	1557	9 23	7 46	—	—	11 0	11·4
1635 Feb. 21 Sat.	Phâlguna	1557	19 39	17 49	18 53	20 25	21 29	t.
1635 Aug. 18 Tues.	Bhâdrapada I	1558	1 52	0 2	1 5	2 39	3 42	t.
1636 Feb. 10 Wed.	Mâgha	1558	21 39	20 46	—	—	22 32	2·7
1636 Aug. 6 Sat.	Śrâvaṇa	1559	14 33	14 7	—	—	14 59	0·6
1637 Dec. 21 Thur.	Pausha	1560	10 43	9 7	—	—	12 19	10·9
1638 June 16 Sat.	Âshâḍha	1561	6 26	4 38	5 44	7 8	8 14	t.
1638 Dec. 10 Mon.	Mârgaśîrsha	1561	25 1	23 11	24 12	25 50	26 51	t.
1639 June 5 Wed.	Jyeshṭha	1562	12 35	10 59	—	—	14 11	11·1
1639 Nov. 30 Sat.	Mârgaśîrsha	1562	9 41	8 46	—	—	10 36	2·9
1641 Apr. 15 Thur.	Vaisâkha	1564	11 20	9 47	—	—	12 53	9·9
1641 Oct. 8 Fri.	Âśvina	1564	18 0	16 41	—	—	19 19	6·6
1642 Apr. 4 Mon.	Chaitra	1565	24 55	23 5	24 6	25 44	26 45	t.
1642 Sept. 28 Wed.	Âśvina	1565	2 45	0 53	1 54	3 36	4 37	t.
1643 Mar. 25 Sat.	Chaitra	1566	7 34	6 51	—	—	8 17	1·7
1643 Sept. 17 Sun.	Âśvina	1566	17 26	16 9	—	—	18 43	6·2
1645 Jan. 31 Fri.	Mâgha	1567	18 13	16 41	—	—	19 45	9·6
1645 July 28 Mon.	Srâvaṇa	1568	12 21	10 38	11 55	12 47	14 4	t.
1646 Jan. 21 Wed.	Mâgha	1568	5 7	3 17	4 18	5 56	6 57	t.
1646 July 17 Fri.	Śrâvaṇa I	1569	16 11	14 27	15 40	16 42	17 55	t.
1647 Jan. 10 Sun.	Pausha	1569	20 25	19 16	—	—	21 34	4·7
1648 May 26 Fri.	Jyeshṭha	1571	11 17	10 13	—	—	12 21	4·0
1648 Nov. 20 Mon.	Mârgaśîrsha	1571	5 29	4 2	—	—	6 56	8·3
1649 May 16 Wed.	Jyeshṭha	1572	1 53	0 1	1 2	2 44	3 45	t.
1649 Nov. 9 Fri.	Kârtttika	1572	5 41	3 50	4 51	6 31	7 32	t.
1650 May 5 Sun.	Vaiśâkha	1573	18 57	17 30	—	—	20 24	8·2
1650 Oct. 29 Tues.	Kârttika	1573	5 55	4 42	—	—	7 8	5·4
1652 Mar. 15 Mon.	Chaitra	1575	3 18	1 47	—	—	4 49	9·5
1652 Sept. 7 Tues.	Bhâdrapada	1575	17 23	15 49	—	—	18 57	10·3
1653 Mar. 4 Fri.	Phâlguna	1575	3 5	1 15	2 17	3 53	4 55	t.
1653 Aug. 28 Sun.	Bhâdrapada	1576	9 40	7 50	8 51	10 29	11 30	t.
1654 Feb. 21 Tues.	Phâlguna	1576	5 33	4 35	—	—	6 31	3·3
1654 Aug. 17 Thur.	Bhâdrapada I	1577	21 46	21 0	—	—	22 32	2·0
1656 Jan. 1 Tues.	Pausha	1578	19 36	18 1	—	—	21 11	10·8

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1	2		3	4	5	6	7	8
1656 June 26 Thur.	Âshâḍha	1579	12 55	11 10	12 20	13 30	14 40	t.
1656 Dec. 21 Sun.	Pausha	1579	9 42	7 52	8 53	10 31	11 32	t.
1657 June 15 Mon.	Âshâḍha	1580	19 36	17 55	19 17	19 55	21 17	t.
1657 Dec. 10 Thur.	Mârgaśirsha	1580	17 56	17 0	—	—	18 52	3·0
1659 Apr. 26 Tues.	Vaiśâkha	1582	19 1	17 33	—	—	20 29	8·6
1659 Oct. 20 Thur.	Kârttika	1582	1 56	0 41	—	—	3 11	5·9
1660 Apr. 15 Sun.	Vaiśâkha	1583	8 24	6 33	7 34	9 14	10 15	t.
1660 Oct. 8 Mon.	Âśvina	1583	10 52	9 0	10 0	11 44	12 44	t.
1661 Apr. 4 Thur.	Chaitra	1584	14 49	13 55	—	—	15 43	2·8
1661 Sept. 28 Sat.	Âśvina	1584	1 40	0 19	—	—	3 1	7·0
1663 Feb. 12 Thur.	Phâlguna	1585	2 26	0 55	—	—	3 57	9·2
1663 Aug. 8 Sat.	Śrâvaṇa	1586	19 21	17 42	—	—	21 0	11·9
1664 Feb. 1 Mon.	Mâgha	1586	13 47	11 57	12 58	14 36	15 37	t.
1664 July 27 Wed.	Śrâvaṇa	1587	22 41	20 54	22 2	23 20	24 28	t.
1665 Jan. 21 Sat.	Mâgha	1587	5 14	4 3	—	—	6 25	5·0
1666 June 6 Wed.	Jyeshṭha	1589	18 25	17 34	—	—	19 16	2·5
1666 Dec. 1 Sat.	Mârgaśîrsha	1589	13 35	12 10	—	—	15 0	7·9
1667 May 27 Mon.	Jyeshṭha	1590	9 23	7 32	8 33	10 13	11 14	t.
1667 Nov. 20 Wed.	Mârgaśîrsha	1590	13 33	11 41	12 42	14 24	15 25	t.
1668 May 16 Sat.	Jyeshṭha	1591	2 32	1 0	—	—	4 4	9·7
1668 Nov 8 Sun.	Kârttika	1591	13 55	12 40	—	—	15 10	5·8
1670 Mar. 26 Sat.	Chaitra	1593	10 33	9 5	—	—	12 1	8.6
1670 Sept. 18 Sun.	Âśvina	1593	25 27	23 56	—	—	26 58	9·3
1671 Mar. 15 Wed.	Chaitra	1594	10 24	8 33	9 34	11 14	12 15	t.
1671 Sept. 8 Fri.	Bhâdrapada	1594	17 27	15 36	16 37	18 17	19 18	t.
1672 Mar, 3 Sun.	Phâlguna	1594	13 24	12 20	—	—	14 28	4.0
1672 Aug. 28 Wed.	Bhâdrapada	1595	5 7	4 10	—	—	6 4	3·1
1674 Jan. 12 Mon.	Pausha	1596	4 26	2 51	—	—	6 1	10·6
1674 July 7 Tues.	Âshâḍha	1597	19 34	17 52	19 13	19 55	21 16	t.
1675 Jan. 1 Fri.	Pausha	1597	18 22	16 32	17 33	19 11	20 12	t.
1675 June 27 Sun.	Âshâḍha	1598	2 39	0 54	2 4	3 14	4 24	t.
1675 Dec. 22 Wed.	Pausha	1598	2 20	1 25	—	—	3 15	2·9
1677 May 7 Mon.	Vaiśâkha	1600	2 36	1 16	—	—	3 56	6·9
1677 Oct. 30 Tues.	Kârttika	1600	9 58	8 44	—	—	11 12	5·6
1678 Apr. 26 Fri.	Vaiśâkha	1601	15 48	13 56	14 56	16 40	17 40	t.
1678 Oct. 19 Sat.	Kârttika	1601	19 11	17 19	18 19	20 3	21 3	t.
1679 Apr. 15 Tues.	Vaiśâkha	1602	21 52	20 48	—	—	22 56	4·0
1679 Oct. 9 Thur.	Âśvina	1602	9 59	8 35	—	—	11 23	7·7
1681 Feb. 22 Tues.	Phâlguna	1603	10 32	9 3	—	—	12 1	8·8
1681 Aug. 19 Fri.	Bhâdrapada	1604	2 28	0 54	—	—	4 2	10·3
1682 Feb. 11 Sat.	Phâlguna	1604	22 19	20 28	21 29	23 9	24 10	t.
1682 Aug. 8 Tues.	Śrâvaṇa	1605	5 20	3 31	4 35	6 5	7 9	t.
1683 Feb. 1 Thur.	Mâgha	1605	13 54	12 42	—	—	15 6	5·3
1683 July 28 Sat.	Śrâvaṇa	1606	5 53	5 17	—	—	6 29	1·2
1684 June 17 Tues.	Ashâḍha	1607	1 33	1 5	—	—	2 1	0.7
1684 Dec. 11 Thur.	Mârgaśîrsha	1607	21 48	20 23	—	—	23 13	7·9
1685 June 6 Sat.	Jyeshṭha	1608	16 49	14 59	16 2	17 36	18 39	t.
1685 Nov. 30 Mon.	Mârgaśîrsha	1608	21 31	19 39	20 40	22 22	23 23	t.
1686 May 27 Thur.	Jyeshṭha	1609	10 3	8 26	—	—	11 40	11·2
1686 Nov. 19 Fri.	Mârgaśîrsha	1609	22 4	20 48	—	—	23 20	6·1

TABLE E.

A. D. Year, Month, and Day.	Hindu Month and Current Śaka Year. ["w. m. i." = with mean intercalations.]	Time measured from Lañka mean sunrise, taken as 6 A. M. Greatest phase. [i.e. moment of full moon] h. m.	Beginning of Eclipse. h. m.	Period of total obscuration. Beginning. h. m.	Period of total obscuration. End. h. m.	End of Eclipse. h. m.	Number of twelfths eclipsed. ["t." = total eclipse.]
1	2	3	4	5	6	7	8
1688 Apr. 5 Thur.	Chaitra 1611	17 38	16 16	—	—	19 0	7·3
1688 Sept. 29 Sat.	Âśvina 1611	9 39	8 11	—	—	11 7	8·5
1689 Mar. 25 Mon.	Chaitra 1612	17 39	15 47	16 48	18 30	19 31	t.
1689 Sept. 18 Wed.	Âśvina 1612	25 24	23 32	24 33	26 15	27 16	t.
1690 Mar. 14 Fri.	Chaitra 1613	21 7	19 57	—	—	22 17	4·9
1690 Sept. 8 Mon.	Bhâdrapada 1613	12 33	11 27	—	—	13 39	4·3
1692 Jan. 23 Sat.	Mâgha 1614	13 14	11 40	—	—	14 48	10·4
1692 July 18 Mon.	Śrâvaṇa 1615	2 13	0 37	—	—	3 49	10·9
1693 Jan. 12 Thur.	Pausha 1615	3 3	1 12	2 13	3 53	4 54	t.
1693 July 7 Fri.	Âshâḍha 1616	9 43	7 55	9 1	10 25	11 31	t.
1694 Jan. 1 Mon.	Pausha 1616	10 36	9 40	—	—	11 32	3·0
1694 June 26 Tues.	Âshâḍha 1617	23 55	23 34	—	—	24 16	0·4
1695 May 18 Sat.	Jyeshṭha 1618	10 8	8 55	—	—	11 21	5·5
1695 Nov. 10 Sun.	Kârttika 1618	18 2	16 50	—	—	19 14	5·2
1696 May 6 Wed.	Vaiśâkha 1619	23 2	21 10	22 10	23 54	24 54	t.
1696 Oct. 30 Fri.	Kârttika 1619	3 32	1 40	2 40	4 24	5 24	t.
1697 Apr. 26 Mon.	Vaiśâkha 1620	4 47	3 33	—	—	6 1	5·7
1697 Oct. 19 Tues.	Kârttika 1620	18 29	17 2	—	—	19 56	8·2
1699 Mar. 5 Sun.	Phâlguna 1621	18 28	17 1	—	—	19 55	8·2
1699 Aug. 30 Wed.	Bhâdrapada 1622	9 40	8 11	—	—	11 9	8·8
1700 Feb. 23 Fri.	Phâlguna 1622	6 43	4 52	5 53	7 33	8 34	t.
1700 Aug. 18 Sun.	Bhâdrapada 1623	12 3	10 13	11 14	12 52	13 53	t.
1701 Feb. 11 Tues.	Mâgha 1623	22 31	21 17	—	—	23 45	5·6
1701 Aug. 7 Thur.	Śrâvaṇa 1624	12 38	11 45	—	—	13 31	2·7
1702 Dec. 23 Wed.	Pausha 1625	6 0	4 37	—	—	7 23	7·5
1703 June 17 Thur.	Ashâḍha 1626	24 19	22 31	23 37	25 1	26 7	t.
1703 Dec. 12 Sun.	Mârgaśîrsha 1626	5 32	3 40	4 41	6 23	7 24	t.
1704 June 6 Tues.	Jyeshṭha 1627	17 29	15 47	17 8	17 50	19 11	t.
1704 Nov. 30 Thur	Mârgaśîrsha 1627	6 16	4 58	—	—	7 34	6·5
1706 Apr. 16 Tues.	Vaiśâkha 1629	24 36	23 22	—	—	25 50	5·7
1706 Oct. 10 Thur.	Aśvina 1629	18 4	16 40	—	—	19 28	7·7
1707 Apr. 5 Sat.	Chaitra 1630	24 45	22 53	23 53	25 37	26 37	t.
1707 Sept. 30 Tues.	Âśvina 1630	9 27	7 35	8 35	10 19	11 19	t.
1708 Mar. 25 Thur.	Chaitra 1631	4 42	3 26	—	—	5 58	6·1
1708 Sept. 18 Sat.	Âśvina 1631	20 2	18 50	—	—	21 14	5·2
1710 Feb. 2 Thur.	Mâgha 1632	21 55	20 22	—	—	23 28	10·1
1710 July 29 Sat.	Śrâvaṇa 1633	9 0	7 29	—	—	10 31	9·4
1711 Jan. 23 Tues.	Mâgha 1633	11 34	9 43	10 44	12 24	13 25	t.
1711 July 18 Wed.	Śrâvaṇa 1634	16 55	15 5	16 8	17 42	18 45	t.
1712 Jan. 12 Sat.	Pausha 1634	18 51	17 53	—	—	19 49	3·2
1712 July 7 Mon.	Ashâḍha 1635	7 26	6 37	—	—	8 15	2·3
1713 May 28 Thur.	Jyeshṭha 1636	17 34	16 31	—	—	18 37	3·9
1713 Nov. 21 Sat.	Mârgaśîrsha 1636	2 20	1 9	—	—	3 31	5·0
1714 May 18 Tues.	Jyeshṭha 1637	6 11	4 20	5 21	7 1	8 2	t.
1714 Nov. 10 Wed.	Kârttika 1637	12 5	10 13	11 14	12 56	13 57	t.
1715 May 7 Sat.	Vaiśâkha 1638	11 34	10 12	—	—	12 56	7·3
1715 Oct. 31 Mon.	Kârttika 1638	3 3	1 33	—	—	4 33	8·9
1717 Mar. 16 Sat.	Chaitra 1640	2 18	0 55	—	—	3 41	7·4
1717 Sept. 9 Mon.	Bhâdrapada 1640	16 57	15 34	—	—	18 20	7·5
1718 Mar. 5 Wed.	Phâlguna 1640	14 58	13 6	14 7	15 49	16 50	t.

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A. D. Year, Month, and Day.	Hindu Month and Current Śaka Year. ["*w. m. i.*" = with mean intercalations.]		Time measured from Laṅka mean sunrise, taken as 6 A. M. Greatest phase. [*i. e.* moment of full moon] h. m.	Beginning of Eclipse. h. m.	Period of total obscuration. Beginning. h. m.	End. h. m.	End of Eclipse. h. m.	Number of twelfths eclipsed. ["*t.*" = total eclipse.]
1	2		3	4	5	6	7	8
1718 Aug. 29 Fri.	Bhâdrapada	1641	18 55	17 3	18 4	19 46	20 47	t.
1719 Feb. 23 Mon.	Phâlguna	1641	7 3	5 47	—	—	8 19	6·1
1719 Aug. 18 Tues.	Bhâdrapada	1642	19 28	18 21	—	—	20 35	4·4
1721 Jan. 2 Mon.	Pausha	1643	14 11	12 48	—	—	15 34	7·4
1721 June 28 Wed.	Âshâḍha	1644	7 46	6 1	7 11	8 21	9 31	t.
1721 Dec. 22 Fri.	Pausha	1644	13 38	11 46	12 47	14 29	15 30	t.
1722 June 17 Sun.	Âshâḍha	1645	24 55	23 10	24 22	25 28	26 40	t.
1722 Dec. 11 Tues.	Mârgaśîrsha	1645	14 33	13 14	—	—	15 52	6·7
1724 Apr. 27 Mon.	Vaiśâkha	1647	7 22	6 17	—	—	8 27	4·2
1724 Oct. 21 Wed.	Kârttika	1647	2 32	1 10	—	—	3 54	7·2
1725 Apr. 16 Fri.	Vaiśâkha	1648	7 42	5 51	6 52	8 32	9 33	t.
1725 Oct. 10 Sun.	Âśvina	1648	17 38	15 46	16 46	18 30	19 30	t.
1726 Apr. 5 Tues.	Chaitra	1649	12 11	10 49	—	—	13 33	7·3
1726 Sept. 30 Fri.	Âśvina	1649	3 40	2 24	—	—	4 56	6·0
1728 Feb. 14 Wed.	Phâlguna	1650	6 32	5 0	—	—	8 4	9.7
1728 Aug. 8 Thur.	Śrâvaṇa	1651	15 53	14 28	—	—	17 18	7·8
1729 Feb. 2 Sun.	Mâgha	1651	20 1	18 10	19 11	20 51	21 52	t.
1729 July 28 Mon.	Śrâvaṇa	1652	24 8	22 17	23 18	24 58	25 59	t.
1730 Jan. 23 Fri.	Mâgha	1652	2 59	2 0	—	—	3 58	3·4
1730 July 18 Sat.	Śrâvaṇa	1653	14 54	13 51	—	—	15 57	3·9
1731 June 9 Wed.	Jyeshṭha	1654	0 53	0 5	—	—	1 41	2·2
1731 Dec. 2 Thur.	Mârgaśîrsha	1654	10 40	9 30	—	—	11 50	4·8
1732 May 28 Sun.	Jyeshṭha	1655	13 10	11 20	12 22	13 58	15 0	t.
1732 Nov. 20 Mon.	Mârgaśîrsha	1655	20 42	18 50	19 51	21 33	22 34	t.
1733 May 17 Thur,	Jyeshṭha	1656	18 12	16 42	—	—	19 42	9·1
1733 Nov. 10 Sat.	Kârttika	1656	11 42	10 12	—	—	13 12	8·9
1735 Mar. 27 Thur.	Chaitra	1658	10 3	8 45	—	—	11 21	6·5
1735 Sept. 20 Sat.	Âśvina	1658	24 21	23 4	—	—	25 38	6·3
1736 Mar. 15 Mon.	Chaitra	1659	23 12	21 20	22 20	24 4	25 4	t.
1736 Sept. 9 Thur.	Bhâdrapada	1659	1 56	0 4	1 4	2 48	3 48	t.
1737 Mar. 5 Sat.	Phâlguna	1659	15 27	14 8	—	—	16 46	6·7
1737 Aug. 29 Mon.	Bhâdrapada	1660	2 28	1 12	—	—	3 44	6·0
1739 Jan. 13 Sat.	Pausha	1661	22 18	20 56	—	—	23 40	7·3
1739 July 9 Mon.	Âshâḍha	1662	15 12	13 29	14 47	15 37	16 55	t.
1740 Jan. 2 Wed.	Pausha	1662	21 37	19 45	20 46	22 28	23 29	t.
1740 June 28 Sat.	Ashâḍha	1663	8 17	6 30	7 36	8 58	10 4	t.
1740 Dec. 21 Sun.	Pausha	1663	22 50	21 30	—	—	24 10	6·8
1742 May 8 Sat.	Vaiśâkha	1665	14 0	13 8	—	—	14 52	2.6
1742 Nov. 1 Mon.	Kârttika	1665	11 6	9 47	—	—	12 25	6.7
1743 Apr. 27 Wed.	Vaiśâkha	1666	14 31	12 41	13 42	15 20	16 21	t.
1743 Oct. 22 Sat.	Kârttika	1666	1 54	0 2	1 3	2 45	3 46	t.
1744 Apr. 15 Sun.	Vaiśâkha	1667	19 32	18 4	—	—	21 0	8·6
1744 Oct. 10 Wed.	Âśvina	1667	11 31	10 11	—	—	12 51	6·8
1746 Feb. 24 Mon.	Phâlguna	1668	14 57	13 26	—	—	16 28	9·2
1746 Aug. 19 Tues.	Bhâdrapada	1669	22 50	21 34	—	—	24 6	6·1
1747 Feb. 14 Sat.	Phâlguna	1669	4 21	2 30	3 31	5 11	6 12	t.
1747 Aug. 9 Sun.	Śrâvaṇa	1670	7 30	5 38	6 39	8 21	9 22	t.
1748 Feb. 3 Wed.	Mâgha	1670	11 3	10 2	—	—	12 4	3·6
1748 July 28 Thur.	Śrâvaṇa	1671	22 25	21 12	—	—	23 38	5·4
1749 June 19 Mon.	Âshâḍha	1672	8 15	7 49	—	—	8 41	0·6

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1	2	3	4	5	6	7	8
1749 Dec. 12 Tues.	Mârgaśîrsha........ 1672	19 6	17 55	—	—	20 17	5·1
1750 June 8 Fri.	Jyeshṭha........ 1673	20 5	18 17	19 23	20 47	21 53	t.
1750 Dec. 2 Sun.	Mârgaśîrsha........ 1673	5 24	3 32	4 33	6 15	7 16	t.
1751 May 28 Tues.	Jyeshṭha........ 1674	24 46	23 10	—	—	26 22	10·9
1751 Nov. 21 Thur.	Mârgaśîrsha........ 1674	20 29	18 58	—	—	22 0	9·2
	NEW STYLE.						
1753 Apr. 17 Tues.	Chaitra........ 1676	17 38	16 25	—	—	18 51	5·5
1753 Oct. 12 Fri.	Âśvina........ 1676	7 52	6 40	—	—	9 4	5·2
1754 Apr. 7 Sun.	Chaitra........ 1677	7 12	5 20	6 20	8 4	9 4	t.
1754 Oct. 1 Tues.	Âśvina........ 1677	9 1	7 9	8 10	9 52	10 53	t.
1755 Mar. 27 Thur.	Chaitra........ 1678	23 40	22 16	—	—	25 4	7·6
1755 Sept. 20 Sat.	Bhâdrapada........ 1678	9 37	8 15	—	—	10 59	7·2
1757 Feb. 4 Fri.	Mâgha........ 1679	6 17	4 57	—	—	7 37	6·9
1757 July 30 Sat.	Śrâvaṇa........ 1680	22 43	21 5	—	—	24 21	11·7
1758 Jan. 24 Tues.	Pausha........ 1680	5 36	3 44	4 44	6 28	7 28	t.
1758 July 20 Thur.	Âshâḍha........ 1681	15 38	13 48	14 52	16 24	17 28	t.
1759 Jan. 13 Sat.	Pausha........ 1681	7 10	5 50	—	—	8 30	6·9
1760 May 29 Thur.	Jyeshṭha........ 1683	20 36	20 5	—	—	21 7	0·9
1760 Nov. 22 Sat.	Kârttika........ 1683	19 46	18 29	—	—	21 3	6·3
1761 May 18 Mon.	Vaiśâkha........ 1684	21 15	19 25	20 29	22 1	23 5	t.
1761 Nov. 12 Thur.	Kârttika........ 1684	10 18	8 26	9 27	11 9	12 10	t.
1762 May 8 Sat.	Vaiśâkha........ 1685	2 49	1 15	—	—	4 23	10·3
1762 Nov. 1 Mon.	Kârttika........ 1685	19 25	18 3	—	—	20 47	7·2
1764 Mar. 17 Sat.	Phâlguna........ 1686	23 18	21 50	—	—	24 46	8·4
1764 Sept. 10 Mon.	Bhâdrapada........ 1687	6 3	4 53	—	—	7 13	4·9
1765 Mar. 7 Thur.	Phâlguna........ 1687	12 36	10 44	11 45	13 27	14 28	t.
1765 Aug. 30 Fri.	Bhâdrapada........ 1688	15 2	13 10	14 10	15 54	16 54	t.
1766 Feb. 24 Mon.	Phâlguna........ 1688	18 58	17 54	—	—	20 2	4·0
1766 Aug. 20 Wed.	Śrâvaṇa........ 1689	6 4	4 44	—	—	7 24	6·8
1768 Jan. 4 Mon.	Pausha........ 1690	3 33	2 23	—	—	4 43	4·9
1768 June 30 Thur.	Âshâḍha........ 1691	2 56	1 11	2 21	3 31	4 41	t.
1768 Dec. 23 Fri.	Mârgaśîrsha........ 1691	14 11	12 19	13 20	15 2	16 3	t.
1769 June 19 Mon.	Jyeshṭha........ 1692	7 16	5 35	6 57	7 35	8 57	t.
1769 Dec. 13 Wed.	Mârgaśîrsha........ 1692	5 17	3 46	—	—	6 48	9.3
1771 Apr. 29 Mon.	Vaiśâkha........ 1694	1 8	0 1	—	—	2 15	4·4
1771 Oct. 23 Wed.	Âśvina........ 1694	15 33	14 26	—	—	16 40	4·4
1772 Apr, 17 Fri.	Chaitra........ 1695	15 9	13 17	14 18	16 0	17 1	t.
1772 Oct. 11 Sun.	Âśvina........ 1695	16 16	14 25	15 26	17 6	18 7	t.
1773 Apr. 7 Wed.	Chaitra........ 1696	7 46	6 18	—	—	9 14	8·4
1773 Sept. 30 Thur.	Âśvina........ 1696	16 55	15 27	—	—	18 23	8·4
1775 Feb. 15 Wed.	Mâgha........ 1697	14 11	12 52	—	—	15 30	6·6
1775 Aug. 11 Fri.	Śrâvaṇa........ 1698	6 20	4 47	—	—	7 53	10·0
1776 Feb. 4 Sun.	Mâgha........ 1698	13 32	11 40	12 40	14 24	15 24	t.
1776 July 30 Tues.	Śrâvaṇa........ 1699	23 6	21 16	22 17	23 55	24 56	t.
1777 Jan. 23 Thur.	Pausha........ 1699	15 28	14 6	—	—	16 50	7·2
1777 July 20 Sun.	Âshâḍha........ 1700	11 55	11 16	—	—	12 34	1·4
1778 Dec. 4 Fri.	Mârgaśîrsha........ 1701	4 32	3 15	—	—	5 49	6·2
1779 May 30 Sun.	Jyeshṭha........ 1702	3 55	2 8	3 15	4 35	5 42	t.
1779 Nov. 23 Tues.	Kârttika........ 1702	18 51	16 59	18 0	19 42	20 43	t.
1780 May 18 Thur.	Vaiśâkha........ 1703	10 1	8 23	—	—	11 39	11·8
1780 Nov. 12 Sun.	Kârttika........ 1703	3 23	1 59	—	—	4 47	7·6

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			h. m.	h. m.	h. m.	h. m.	h. m.	
1	2		3	4	5	6	7	8
1782 Mar. 29 Fri.	Chaitra	1705	7 31	6 6	—	—	8 56	7·8
1782 Sept. 21 Sat.	Bhâdrapada	1705	13 20	12 18	—	—	14 22	3·7
1783 Mar. 18 Tues.	Phâlguna	1705	20 37	18 45	19 45	21 29	22 29	t.
1783 Sept. 10 Wed.	Bhâdrapada	1706	22 38	20 46	21 47	23 29	24 30	t.
1784 Mar. 7 Sun.	Phâlguna	1706	2 42	1 32	—	—	3 52	4·8
1784 Aug. 30 Mon.	Bhâdrapada	1707	13 48	12 22	—	—	15 14	8·0
1786 Jan. 14 Sat.	Pausha	1708	12 0	10 50	—	—	13 10	4·8
1786 July 11 Tues.	Âshâḍha	1709	9 49	8 8	9 29	10 9	11 30	t.
1787 Jan. 3 Wed.	Pausha	1709	22 59	21 7	22 8	23 50	24 51	t.
1787 June 30 Sat.	Âshâḍha	1710	13 43	11 58	13 9	14 17	15 28	t.
1787 Dec. 24 Mon.	Mârgaśîrsha	1710	14 8	12 37	—	—	15 39	9·4
1789 May 9 Sat.	Vaiśâkha	1712	8 32	7 34	—	—	9 30	3·2
1789 Nov. 2 Mon.	Kârttika	1712	23 20	22 18	—	—	24 22	3·8
1790 Apr. 28 Wed.	Vaiśâkha	1713	23 1	21 10	22 11	23 51	24 52	t.
1790 Oct. 22 Fri.	Âśvina	1713	23 44	21 54	22 55	24 33	25 34	t.
1791 Apr. 18 Mon.	Chaitra	1714	15 45	14 14	—	—	17 16	9·5
1791 Oct. 11 Tues.	Âśvina	1714	24 27	22 56	—	—	25 58	9·3
1793 Feb. 25 Mon.	Phâlguna	1715	22 4	20 49	—	—	23 19	5·9
1793 Aug. 21 Wed.	Srâvaṇa	1716	14 2	12 33	—	—	15 31	8·8
1794 Feb. 14 Fri.	Mâgha	1716	21 26	19 34	20 35	22 17	23 18	t.
1794 Aug. 11 Mon.	Śrâvaṇa	1717	6 33	4 41	5 42	7 24	8 25	t.
1795 Feb. 3 Tues.	Mâgha	1717	23 44	22 21	—	—	25 7	7·5
1795 July 31 Fri.	Srâvaṇa	1718	18 56	17 58	—	—	19 54	3·2
1796 Dec. 14 Wed.	Mârgaśîrsha	1719	13 22	12 6	—	—	14 38	6·1
1797 June 9 Fri.	Jyeshṭha	1720	10 35	8 51	10 4	11 6	12 19	t.
1797 Dec. 4 Mon.	Mârgaśîrsha	1720	3 23	1 32	2 33	4 13	5 14	t.
1798 May 29 Tues.	Jyeshṭha	1721	17 12	15 30	16 48	17 36	18 54	t.
1798 Nov. 23 Fri.	Kârttika	1721	11 30	10 5	—	—	12 55	7·9
1800 Apr. 9 Wed.	Chaitra	1723	15 31	14 11	—	—	16 51	6·9
1800 Oct. 2 Thur.	Âśvina	1723	20 47	19 53	—	—	21 41	2·8
1801 Mar. 30 Mon.	Chaitra	1724	4 29	2 37	3 37	5 21	6 21	t.
1801 Sept. 22 Tues.	Bhâdrapada	1724	6 21	4 30	5 31	7 11	8 12	t.
1802 Mar. 19 Fri.	Phâlguna	1724	10 21	9 8	—	—	11 34	5·4
1802 Sept. 11 Sat.	Bhâdrapada	1725	21 39	20 8	—	—	23 10	9·4
1804 Jan. 26 Thur.	Mâgha	1726	20 23	19 14	—	—	21 32	4·7
1804 July 22 Sun.	Ashâḍha	1727	16 42	15 6	—	—	18 18	10·9
1805 Jan. 15 Tues.	Pausha	1727	7 44	5 52	6 53	8 35	9 36	t.
1805 July 11 Thur.	Âshâḍha	1728	20 8	18 20	19 25	20 51	21 56	t.
1806 Jan. 4 Sat.	Pausha	1728	23 5	21 34	—	—	24 36	9·4
1807 May 21 Thur.	Vaiśâkha	1730	15 53	15 9	—	—	16 37	1·8
1807 Nov. 15 Sun.	Kârttika	1730	7 13	6 15	—	—	8 11	3·2
1808 May 10 Tues.	Vaiśâkha	1731	6 41	4 51	5 52	7 30	8 31	t.
1808 Nov. 3 Thur.	Kârttika	1731	7 18	5 28	6 30	8 6	9 8	t.
1809 Apr. 29 Sat.	Vaiśâkha	1732	23 36	22 1	—	—	25 11	10·6
1809 Oct. 23 Mon.	Âśvina	1732	8 8	6 34	—	—	9 42	10·2
1811 Mar. 10 Sun.	Phâlguna	1733	5 43	4 31	—	—	6 55	5·3
1811 Sept. 2 Mon.	Bhâdrapada	1734	21 48	20 25	—	—	23 11	7·4
1812 Feb. 27 Thur.	Phâlguna	1734	5 9	3 17	4 18	6 0	7 1	t.
1812 Aug. 22 Sat.	Srâvaṇa	1735	14 5	12 13	13 13	14 57	15 57	t.
1813 Feb. 15 Mon.	Mâgha	1735	7 54	6 28	—	—	9 20	8·0

TABLE E.

A. D. Year, Month, and Day.	Hindu Month and Current Śaka Year. ["*w. m. i.*" = with mean intercalations.]	Time measured from Laṅka mean sunrise, taken as 6 A. M. Greatest phase. [*i. e.* moment of fullmoon] h. m.	Beginning of Eclipse. h. m.	Period of total obscuration. Beginning. h. m.	Period of total obscuration. End. h. m.	End of Eclipse. h. m.	Number of twelfths eclipsed. ["*t.*" = total eclipse.]
1	2	3	4	5	6	7	8
1813 Aug. 12 Thur.	Śrâvaṇa 1736	1 55	0 48	—	—	3 2	4·5
1814 Dec. 26 Mon.	Mârgaśîrsha 1737	22 13	20 57	—	—	23 29	6·0
1815 June 21 Wed.	Jyeshṭha 1738	17 11	15 31	16 57	17 25	18 51	t.
1815 Dec. 16 Sat.	Mârgaśîrsha 1738	12 1	10 10	11 11	12 51	13 52	t.
1816 June 9 Sun.	Jyeshṭha 1739	24 20	22 34	23 44	24 56	26 6	t.
1816 Dec. 4 Wed.	Mârgaśîrsha 1739	19 38	18 11	—	—	21 5	8·2
1818 Apr. 20 Mon.	Chaitra 1741	23 28	22 14	—	—	24 42	5·6
1818 Oct. 14 Wed.	Âśvina 1741	4 26	3 42	—	—	5 10	1·8
1819 Apr. 10 Sat.	Chaitra 1742	12 12	10 20	11 21	13 3	14 4	t.
1819 Oct. 3 Sun.	Âśvina 1742	14 15	12 25	13 26	15 4	16 5	t.
1820 Mar. 29 Wed.	Chaitra 1743	17 47	16 29	—	—	19 5	6·4
1820 Sept. 22 Fri.	Bhâdrapada 1743	5 37	4 3	—	—	7 11	10·3
1822 Feb. 6 Wed.	Mâgha 1744	4 45	3 37	—	—	5 53	4·6
1822 Aug. 2 Fri.	Śrâvaṇa 1745	23 31	22 1	—	—	25 1	9·1
1823 Jan. 26 Sun.	Mâgha 1745	16 28	14 36	15 37	17 19	18 20	t.
1823 July 23 Wed.	Âshâḍha 1746	2 35	0 45	1 48	3 22	4 25	t.
1824 Jan. 16 Fri.	Pausha 1746	7 56	6 24	—	—	9 28	9.6
1824 July 11 Sun.	Âshâḍha 1747	3 19	2 34	—	—	4 4	1·9
1825 May 31 Tues.	Jyeshṭha 1748	23 12	22 54	—	—	23 30	0.3
1825 Nov. 25 Fri.	Kârttika 1748	15 11	14 17	—	—	16 5	2·8
1826 May 21 Sun.	Vaiśâkha 1749	14 19	12 29	13 33	15 5	16 9	t.
1826 Nov. 14 Tues.	Kârttika 1749	15 0	13 10	14 14	15 46	16 50	t.
1827 May 11 Fri.	Vaiśâkha 1750	7 19	5 40	7 12	7 26	8 58	t.
1827 Nov. 3 Sat.	Kârttika 1750	15 57	14 22	—	—	17 32	10·6
1829 Mar. 20 Fri.	Phâlguna 1751	13 8	12 1	—	—	14 15	4·4
1829 Sept. 13 Sun.	Bhâdrapada 1752	5 38	4 21	—	—	6 55	6·3
1830 Mar. 9 Tues.	Phâlguna 1752	12 46	10 55	11 56	13 36	14 37	t.
1830 Sept. 2 Thur.	Bhâdrapada 1753	21 39	19 47	20 47	22 31	23 31	t.
1831 Feb. 26 Sat.	Phâlguna 1753	16 0	14 33	—	—	17 27	8·3
1831 Aug. 23 Tues.	Śrâvaṇa 1754	9 0	7 45	—	—	10 15	5·9
1833 Jan. 6 Sun.	Pausha 1755	7 3	5 48	—	—	8 18	5.8
1833 July 1 Mon.	Âshâḍha 1756	23 46	22 12	—	—	25 20	10.5
1833 Dec. 26 Thur.	Mârgaśîrsha 1756	20 35	18 44	19 45	21 25	22 26	t.
1834 June 21 Sat.	Jyeshṭha 1757	7 24	5 35	6 41	8 7	9 13	t.
1834 Dec. 16 Tues.	Mârgaśîrsha 1757	3 50	2 23	—	—	5 17	8·2
1835 June 10 Wed.	Jyeshṭha 1758	21 38	21 3	—	—	22 13	1·1
1836 May 1 Sun.	Vaiśâkha 1759	7 12	6 5	—	—	8 19	4·5
1836 Oct. 24 Mon.	Âśvina 1759	12 18	11 39	—	—	12 57	1·4
1837 Apr. 20 Thur.	Chaitra 1760	19 45	17 54	18 55	20 35	21 36	t.
1837 Oct. 13 Fri.	Âśvina 1760	22 20	20 30	21 32	23 8	24 10	t.
1838 Apr. 9 Mon.	Chaitra 1761	25 1	23 38	—	—	26 24	7·5
1838 Oct. 3 Wed.	Âśvina 1761	13 43	12 6	—	—	15 20	11·4
1840 Feb. 17 Mon.	Mâgha 1762	13 6	11 59	—	—	14 13	4·5
1840 Aug. 13 Thur.	Śrâvaṇa 1763	6 22	4 59	—	—	7 45	7·4
1841 Feb. 5 Fri.	Mâgha 1763	25 11	23 19	24 20	26 2	27 3	t.
1841 Aug. 2 Mon.	Śrâvaṇa 1764	9 2	7 11	8 12	9 52	10 53	t.
1842 Jan. 26 Wed.	Pausha 1764	16 46	15 14	—	—	18 18	9·6
1842 July 22 Fri.	Âshâḍha 1765	9 51	8 50	—	—	10 52	3·6
1843 Dec. 6 Wed.	Mârgaśîrsha 1766	23 14	22 23	—	—	24 5	2.5
1844 May 31 Fri.	Jyeshṭha 1767	21 52	20 5	21 11	22 33	23 39	t.

TABLE E.

A. D. Year, Month, and Day.	Hindu Month and Current Śaka Year. ["*w. m. i.*" = with mean intercalations.]	Time measured from Laṅka mean sunrise, taken as 6 A. M. — Greatest phase. [*i. e.* moment of fullmoon] h. m.	Beginning of Eclipse. h. m.	Period of total obscuration. — Beginning. h. m.	Period of total obscuration. — End. h. m.	End of Eclipse. h. m.	Number of twelfths eclipsed. ["*t.*" = total eclipse.]
1	2	3	4	5	6	7	8
1844 Nov. 24 Sun.	Kârttika 1767	22 49	21 0	22 4	23 34	24 38	t.
1845 May 21 Wed.	Vaiśâkha 1768	14 58	13 15	14 33	15 23	16 41	t.
1845 Nov. 13 Thur.	Kârttika 1768	23 51	22 14	—	—	25 28	11·2
1847 Mar. 31 Wed.	Chaitra 1770	20 29	19 29	—	—	21 29	3·5
1847 Sept. 24 Fri.	Bhâdrapada 1770	13 36	12 24	—	—	14 48	5·2
1848 Mar. 19 Sun.	Phâlguna 1770	20 15	18 25	19 26	21 4	22 5	t.
1848 Sept. 13 Wed.	Bhâdrapada 1771	5 25	3 33	4 34	6 16	7 17	t.
1849 Mar. 8 Thur.	Phâlguna 1771	23 59	22 29	—	—	25 29	9·1
1849 Sept. 2 Sun.	Bhâdrapada 1772	16 15	14 53	—	—	17 37	7·2
1851 Jan. 17 Fri.	Pausha 1773	15 55	14 41	—	—	17 9	5·7
1851 July 13 Sun.	Âshâḍha 1774	6 24	4 55	—	—	7 53	8·7
1852 Jan. 7 Wed.	Pausha 1774	5 16	3 25	4 26	6 6	7 7	t.
1852 July 1 Thur.	Âshâḍha 1775	14 29	12 39	13 41	15 17	16 19	t.
1852 Dec. 26 Sun.	Mârgaśîrsha 1775	12 5	10 38	—	—	13 32	8·3
1853 June 21 Tues.	Jyeshṭha 1776	5 5	4 12	—	—	5 58	2·7
1854 May 12 Fri.	Vaiśâkha 1777	14 52	13 54	—	—	15 50	3·2
1854 Nov. 4 Sat.	Kârttika 1777	20 16	19 46	—	—	20 46	0·8
1855 May 2 Wed.	Vaiśâkha 1778	3 9	1 19	2 20	3 58	4 59	t.
1855 Oct. 25 Thur.	Âśvina 1778	6 34	4 44	5 48	7 20	8 24	t.
1856 Apr. 20 Sun.	Chaitra 1779	8 11	6 42	—	—	9 40	8·7
1856 Oct. 13 Mon.	Âśvina 1779	21 57	20 18	21 50	22 4	23 36	t.
1858 Feb. 27 Sat.	Phâlguna 1780	21 19	20 14	—	—	22 24	4·2
1858 Aug. 24 Tues.	Srâvaṇa 1781	13 22	12 7	—	—	14 37	5·8
1859 Feb. 17 Thur.	Mâgha 1781	9 48	7 57	8 58	10 38	11 39	t.
1859 Aug. 13 Sat.	Srâvaṇa 1782	15 35	13 43	14 43	16 27	17 27	t.
1860 Feb. 6 Mon.	Mâgha 1782	25 31	23 59	—	—	27 3	9·7
1860 Aug. 1 Wed.	Srâvaṇa 1783	16 27	15 13	—	—	17 41	5·6
1861 Dec. 17 Tues.	Mârgaśîrsha 1784	7 17	6 29	—	—	8 5	2·2
1862 June 12 Thur.	Jyeshṭha 1784	5 22	3 38	4 50	5 54	7 6	t.
1862 Dec. 6 Sat.	Mârgaśîrsha 1785	6 43	4 54	5 59	7 27	8 32	t.
1863 June 1 Mon.	Jyeshṭha 1786	22 27	20 42	21 52	23 2	24 12	t.
1863 Nov. 25 Wed.	Kârttika 1786	8 0	6 22	—	—	9 38	11·6
1865 Apr. 11 Tues.	Chaitra 1788	3 39	2 48	—	—	4 30	2·5
1865 Oct. 4 Wed.	Âśvina 1788	21 45	20 40	—	—	22 50	4·2
1866 Mar. 31 Sat.	Chaitra 1789	3 36	1 46	2 48	4 24	5 26	t.
1866 Sept. 24 Mon.	Bhâdrapada 1789	13 10	11 20	12 21	13 59	15 0	t.
1867 Mar. 20 Wed.	Phâlguna 1789	7 52	6 20	—	—	9 24	9·8
1867 Sept. 13 Fri.	Bhâdrapada 1790	23 29	22 1	—	—	24 57	8·4
1869 Jan. 27 Wed.	Mâgha 1791	24 44	23 30	—	—	25 58	5·6
1869 July 23 Fri.	Âshâḍha 1792	13 7	11 47	—	—	14 27	6·8
1870 Jan. 17 Mon.	Pausha 1792	13 50	11 59	13 0	14 40	15 41	t.
1870 July 12 Tues.	Âshâḍha 1793	21 37	19 46	20 47	22 27	23 28	t.
1871 Jan. 6 Fri.	Pausha 1793	20 19	18 51	—	—	21 47	8·5
1871 July 2 Sun.	Âshâḍha 1794	12 27	11 22	—	—	13 32	4·2
1872 May 22 Wed.	Vaiśâkha 1795	22 23	21 41	—	—	23 5	1·6
1872 Nov. 15 Fri,	Kârttika 1795	4 24	4 3	—	—	4 45	0·4
1873 May 12 Mon.	Vaiśâkha 1796	10 23	8 34	9 38	11 8	12 12	t.
1873 Nov. 4 Tues.	Kârttika 1796	14 55	13 6	14 10	15 40.	16 44	t.
1874 May 1 Fri.	Vaiśâkha 1797	15 8	13 35	—	—	16 41	10·0
1874 Oct. 25 Sun.	Âśvina 1797	6 15	4 33	5 54	6 36	7 57	t.

TABLE E.

A.D. Year, Month, and Day.	Hindu Month and Current Śaka Year. ["w. m. i." = with mean intercalations.]		Time measured from Laṅka mean sunrise, taken as 6 A.M. Greatest phase. [i.e. moment of full moon]		Beginning of Eclipse.		Period of total obscuration. Beginning.		Period of total obscuration. End.		End of Eclipse.		Number of twelfths eclipsed. ["t." = total eclipse.]
			h.	m.	h.	m.	h.	m.	h.	m.	h	m.	
1	2		3		4		5		6		7		8
1876 Mar. 10 Fri.	Phâlguna	1798	5	24	4	22	—		—		6	26	3·8
1876 Sept. 3 Sun.	Bhâdrapada	1799	20	26	19	22	—		—		21	30	4·0
1877 Feb. 27 Tues.	Phâlguna	1799	18	22	16	31	17	32	19	12	20	13	t.
1877 Aug. 23 Thur.	Śrâvaṇa	1800	22	13	20	22	21	23	23	3	24	4	t.
1878 Feb. 17 Sun.	Mâgha	1800	10	12	8	38	—		—		11	46	10·3
1878 Aug. 12 Mon.	Śrâvaṇa	1801	23	10	21	47	—		—		24	33	7·4
1879 Dec. 28 Sun.	Mârgaśîrsha	1802	15	25	14	40	—		—		16	10	1·9
1880 June 22 Tues.	Jyeshtha	1803	12	52	11	10	12	31	13	13	14	34	t.
1880 Dec. 16 Thur.	Mârgaśîrsha	1803	14	42	12	54	13	59	15	25	16	30	t.
1881 June 12 Sun.	Jyeshṭha	1804	5	57	4	9	5	15	6	39	7	45	t.
1881 Dec, 5 Mon.	Mârgaśîrsha	1804	16	12	14	33	16	12	16	12	17	51	t.
1883 Apr. 22 Sun.	Chaitra	1806	10	40	10	5	—		—		11	15	1·1
1883 Oct. 16 Tues.	Âśvina	1806	5	57	4	59	—		—		6	55	3·3
1884 Apr. 10 Wed.	Chaitra	1807	10	50	9	1	10	5	11	35	12	39	t.
1884 Oct. 4 Sat.	Âśvina	1807	21	6	19	16	20	18	21	54	22	56	t.
1885 Mar. 30 Mon.	Chaitra	1808	15	39	14	3	—		—		17	15	11·0
1885 Sept. 24 Thur.	Bhâdrapada	1808	6	52	5	20	—		—		8	24	9·6
1887 Feb. 8 Tues.	Mâgha	1809	9	25	8	13	—		—		10	37	5·3
1887 Aug. 3 Wed.	Śrâvaṇa	1810	19	50	18	39	—		—		21	1	5·1
1888 Jan. 28 Sat.	Mâgha	1810	22	21	20	30	21	31	23	11	24	12	t.
1888 July 23 Mon.	Âshâḍha	1811	4	49	2	57	3	57	5	41	6	41	t.
1889 Jan. 17 Thur.	Pausha	1811	4	33	3	5	—		—		6	1	8·4
1889 July 12 Fri.	Âshâḍha	1812	19	55	18	40	—		—		21	10	5·9
1890 June 3 Tues.	Jyeshtha	1813	5	49	5	38	—		—		6	0	0·1
1890 Nov. 26 Wed.	Kârttika	1813	12	36	12	25	—		—		12	47	0·1
1891 May 23 Sat.	Vaiśâkha	1814	17	29	15	42	16	50	18	8	19	16	t.
1891 Nov. 15 Sun.	Kârttika	1814	23	21	21	32	22	38	24	4	25	10	t.
1892 May 11 Wed.	Vaiśâkha	1815	21	56	20	18	—		—		23	34	11·6
1892 Nov. 4 Fri.	Kârttika	1815	14	46	13	4	14	22	15	10	16	28	t.
1894 Mar. 21 Wed,	Phâlguna	1816	13	24	12	27	—		—		14	21	3·1
1894 Sept. 15 Sat.	Bhâdrapada	1817	3	30	2	36	—		—		4	24	2·8
1895 Mar. 11 Mon.	Phâlguna	1817	2	45	0	54	1	55	3	35	4	36	t.
1895 Sept. 4 Wed.	Bhâdrapada	1818	4	59	3	9	4	11	5	47	6	49	t.
1896 Feb. 28 Fri.	Phâlguna	1818	18	48	17	13	—		—		20	23	10·7
1896 Aug. 23 Sun.	Śrâvaṇa	1819	6	0	4	30	—		—		7	30	9·0
1898 Jan. 7 Fri.	Pausha	1820	23	33	22	49	—		—		24	17	1·8
1898 July 3 Sun.	Âshâḍha	1821	20	20	18	43	—		—		21	57	11·2
1898 Dec. 27 Tues.	Mârgaśîrsha	1821	22	41	20	53	21	59	23	23	24	29	t.
1899 June 23 Fri.	Jyeshṭha	1822	13	20	11	30	12	33	14	7	15	10	t.
1899 Dec. 16 Sat.	Mârgaśîrsha	1822	24	28	22	48	24	18	24	38	26	8	t.
1900 June 13 Wed.	Jyeshṭha	1823	2	27	2	12	—		—		2	42	0·2

TABLE F.

MEAN TO APPARENT TIME CORRECTION-TABLE.

Day.	OLD STYLE. A. D. 200	A. D. 400	A. D. 600	A. D. 800	A. D. 1000	A. D. 1200	A. D. 1400	A. D. 1600	A. D. 1700 to Sept. 2nd. 1752	NEW STYLE. Since Sept. 14 A. D. 1752
	m.	m.	m.	m.	m.	m.	m.	m.	m.	m.
January 1..........	− 12	− 11	− 10	− 10	− 9	− 9	− 9	− 9	− 8	− 4
,, 6..........	− 14	− 13	− 13	− 12	− 11	− 11	− 11	− 11	− 10	− 6
,, 11..........	− 16	− 15	− 15	− 14	− 13	− 13	− 13	− 12	− 12	− 8
,, 16..........	− 18	− 16	− 16	− 16	− 15	− 14	− 14	− 13	− 13	− 10
,, 21..........	− 19	− 18	− 17	− 17	− 16	− 15	− 15	− 14	− 14	− 12
,, 26..........	− 19	− 19	− 18	− 18	− 17	− 16	− 15	− 14	− 14	− 13
,, 31..........	− 20	− 19	− 18	− 18	− 17	− 16	− 16	− 15	− 14	− 14
February 5..........	− 20	− 19	− 18	− 17	− 16	− 16	− 15	− 15	− 14	− 14
,, 10..........	− 19	− 18	− 18	− 17	− 16	− 16	− 15	− 14	− 13	− 14
,, 15..........	− 18	− 17	− 17	− 16	− 15	− 15	− 14	− 13	− 13	− 14
,, 20..........	− 17	− 16	− 16	− 15	− 15	− 14	− 13	− 13	− 12	− 14
,, 25..........	− 16	− 15	− 14	− 14	− 13	− 12	− 12	− 12	− 11	− 13
March 2..........	− 14	− 13	− 13	− 12	− 12	− 11	− 11	− 10	− 10	− 13
,, 7..........	− 12	− 11	− 11	− 10	− 10	− 9	− 9	− 8	− 8	− 11
,, 12..........	− 9	− 9	− 9	− 9	− 8	− 8	− 7	− 7	− 7	− 10
,, 17..........	− 7	− 7	− 7	− 7	− 6	− 6	− 5	− 5	− 5	− 8
,, 22..........	− 5	− 5	− 5	− 5	− 5	− 4	− 4	− 4	− 4	− 7
,, 27..........	− 3	− 3	− 3	− 3	− 3	− 3	− 2	− 2	− 2	− 5
April 1..........	0	− 1	− 1	− 1	− 1	− 1	− 1	− 1	0	− 4
,, 6..........	+ 2	+ 1	+ 1	+ 1	+ 1	0	0	+ 1	+ 1	− 2
,, 11..........	+ 4	+ 3	+ 3	+ 2	+ 2	+ 2	+ 2	+ 2	+ 1	− 1
,, 16..........	+ 6	+ 5	+ 5	+ 4	+ 3	+ 3	+ 3	+ 3	+ 2	0
,, 21..........	+ 7	+ 6	+ 6	+ 5	+ 4	+ 4	+ 4	+ 4	+ 3	+ 1
,, 26..........	+ 9	+ 7	+ 7	+ 6	+ 5	+ 4	+ 4	+ 4	+ 4	+ 2
May 1..........	+ 10	+ 8	+ 8	+ 7	+ 6	+ 5	+ 5	+ 4	+ 4	+ 3
,, 6..........	+ 10	+ 9	+ 8	+ 7	+ 6	+ 5	+ 5	+ 4	+ 4	+ 3
,, 11..........	+ 10	+ 9	+ 8	+ 7	+ 6	+ 5	+ 5	+ 4	+ 4	+ 4
,, 16..........	+ 9	+ 8	+ 7	+ 7	+ 6	+ 5	+ 4	+ 3	+ 3	+ 4
,, 21..........	+ 9	+ 8	+ 7	+ 6	+ 6	+ 5	+ 4	+ 3	+ 3	+ 3
,, 26..........	+ 8	+ 7	+ 6	+ 6	+ 5	+ 4	+ 3	+ 2	+ 2	+ 3
,, 31..........	+ 7	+ 6	+ 6	+ 5	+ 4	+ 3	+ 2	+ 1	+ 1	+ 3
June 5..........	+ 6	+ 5	+ 5	+ 4	+ 3	+ 2	+ 1	0	0	+ 2
,, 10..........	+ 4	+ 4	+ 3	+ 2	+ 2	+ 1	0	− 1	− 1	+ 1
,, 15..........	+ 2	+ 2	+ 1	+ 1	0	0	− 1	− 2	− 2	0
,, 20..........	0	0	0	0	− 1	− 1	− 2	− 3	− 3	− 1
,, 25..........	− 2	− 2	− 2	− 2	− 2	− 2	− 3	− 3	− 3	− 2
,, 30..........	− 3	− 3	− 3	− 3	− 3	− 3	− 4	− 4	− 4	− 3

TABLE F.

MEAN TO APPARENT TIME CORRECTION-TABLE.

Day.	Old Style. A. D. 200	A. D. 400	A. D. 600	A. D. 800	A. D. 1000	A. D. 1200	A. D. 1400	A. D. 1600	A. D. 1700 to Sept. 2nd. 1752	New Style. Since Sept. 14 A. D. 1752
	m.	m.	m.	m.	m.	m.	m.	m.	m.	m.
July 5	− 5	− 5	− 5	− 4	− 4	− 4	− 4	− 4	− 4	− 4
,, 10	− 6	− 6	− 6	− 5	− 5	− 5	− 5	− 5	− 5	− 5
,, 15	− 7	− 6	− 6	− 5	− 5	− 5	− 5	− 5	− 6	− 5
,, 20	− 8	− 7	− 7	− 6	− 6	− 6	− 6	− 6	− 6	− 6
,, 25	− 8	− 7	− 7	− 6	− 6	− 6	− 6	− 6	− 6	− 6
,, 30	− 8	− 7	− 7	− 6	− 6	− 5	− 5	− 5	− 5	− 6
August 4	− 7	− 6	− 6	− 5	− 5	− 5	− 4	− 4	− 4	− 6
,, 9	− 7	− 6	− 5	− 5	− 4	− 4	− 4	− 3	− 3	− 5
,, 14	− 6	− 5	− 4	− 4	− 3	− 3	− 3	− 2	− 2	− 4
,, 19	− 4	− 4	− 3	− 2	− 2	− 2	− 1	− 1	0	− 3
,, 24	− 2	− 2	− 1	− 1	0	0	+ 1	+ 1	+ 1	− 2
,, 29	0	0	0	+ 1	+ 1	+ 2	+ 2	+ 2	+ 3	− 1
September 3	+ 2	+ 2	+ 2	+ 2	+ 3	+ 3	+ 3	+ 4	+ 4	0
,, 8	+ 4	+ 4	+ 4	+ 4	+ 5	+ 5	+ 5	+ 6	+ 6	+ 2
,, 13	+ 6	+ 6	+ 6	+ 6	+ 6	+ 7	+ 7	+ 7	+ 8	+ 4
,, 18	+ 8	+ 8	+ 8	+ 8	+ 8	+ 8	+ 9	+ 9	+ 9	+ 6
,, 23	+ 10	+ 10	+ 10	+ 10	+ 10	+ 10	+ 11	+ 11	+ 11	+ 8
,, 28	+ 12	+ 12	+ 12	+ 12	+ 12	+ 12	+ 12	+ 12	+ 12	+ 10
October 5	+ 14	+ 13	+ 13	+ 13	+ 13	+ 13	+ 13	+ 13	+ 14	+ 11
,, 8	+ 16	+ 15	+ 15	+ 15	+ 15	+ 15	+ 15	+ 15	+ 15	+ 12
,, 13	+ 17	+ 17	+ 16	+ 16	+ 16	+ 16	+ 16	+ 16	+ 16	+ 13
,, 18	+ 18	+ 18	+ 17	+ 16	+ 16	+ 16	+ 16	+ 16	+ 16	+ 14
,, 23	+ 18	+ 18	+ 17	+ 17	+ 16	+ 16	+ 16	+ 16	+ 16	+ 15
,, 28	+ 19	+ 18	+ 18	+ 17	+ 17	+ 16	+ 16	+ 16	+ 16	+ 16
November 2	+ 19	+ 18	+ 17	+ 17	+ 16	+ 16	+ 15	+ 15	+ 15	+ 16
,, 7	+ 18	+ 17	+ 16	+ 16	+ 15	+ 15	+ 15	+ 14	+ 14	+ 16
,, 12	+ 17	+ 16	+ 15	+ 15	+ 14	+ 14	+ 13	+ 13	+ 13	+ 16
,, 17	+ 15	+ 14	+ 14	+ 13	+ 13	+ 12	+ 12	+ 12	+ 11	+ 15
,, 22	+ 13	+ 12	+ 12	+ 11	+ 11	+ 10	+ 10	+ 10	+ 9	+ 13
,, 27	+ 10	+ 9	+ 9	+ 9	+ 9	+ 8	+ 8	+ 8	+ 7	+ 12
December 2	+ 7	+ 7	+ 7	+ 7	+ 7	+ 6	+ 6	+ 6	+ 6	+ 10
,, 7	+ 4	+ 4	+ 4	+ 4	+ 4	+ 4	+ 3	+ 3	+ 3	+ 8
,, 12	+ 1	+ 1	+ 1	+ 1	+ 1	+ 1	+ 1	+ 1	0	+ 6
,, 17	− 2	− 2	− 2	− 2	− 2	− 2	− 2	− 2	− 2	+ 3
,, 22	− 6	− 5	− 5	− 5	− 5	− 5	− 5	− 5	− 5	+ 1
,, 27	− 9	− 8	− 8	− 7	− 7	− 7	− 7	− 7	− 8	− 1
,, 32	− 12	− 11	− 10	− 9	− 9	− 9	− 9	− 9	− 9	− 3
,, 37	− 14	− 13	− 12	− 12	− 11	− 11	− 11	− 11	− 10	− 6

TABLE G.

APPARENT TIME OF THE SUN'S RISING AND SETTING.

N.B. *On and after each date entered herein use the column to which it refers. The arrows indicate the order.*

Latitude.	NORTH DECLINATION.													
	0°		2°		4°		6°		8°		9°		10°	
	Mar. 17 → ← Sept. 19		Mar. 23 → ← Sept. 15		Mar. 28 → ← Sept. 10		Apr. 1 → ← Sept. 5		Apr. 8 → ← Sept. 1		Apr. 12 → ← Aug. 29		Apr. 14 → ← Aug. 26	
	rises	sets	rises	sets	rises	sets	rises	sets	rises	sets	rises	sets	rises	sets
	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.
0°	6 0	6 0	6 0	6 0	6 0	6 0	6 0	6 0	6 0	6 0	6 0	6 0	6 0	6 0
2°	6 0	6 0	6 0	6 0	6 0	6 0	6 0	6 0	5 59	6 1	5 59	6 1	5 59	6 1
4°	6 0	6 0	6 0	6 0	5 59	6 1	5 59	6 1	5 58	6 2	5 58	6 2	5 57	6 3
6°	6 0	6 0	6 0	6 0	5 58	6 2	5 58	6 2	5 57	6 3	5 57	6 3	5 56	6 4
8°	6 0	6 0	5 59	6 1	5 58	6 2	5 57	6 3	5 56	6 4	5 55	6 5	5 55	6 5
10°	6 0	6 0	5 59	6 1	5 57	6 3	5 56	6 4	5 54	6 6	5 54	6 6	5 53	6 7
12°	6 0	6 0	5 58	6 2	5 57	6 3	5 55	6 5	5 53	6 7	5 53	6 7	5 52	6 8
14°	6 0	6 0	5 58	6 2	5 56	6 4	5 54	6 6	5 52	6 8	5 51	6 9	5 51	6 9
16°	6 0	6 0	5 58	6 2	5 55	6 5	5 53	6 7	5 51	6 9	5 50	6 10	5 48	6 12
18°	6 0	6 0	5 58	6 2	5 55	6 5	5 52	6 8	5 50	6 10	5 48	6 12	5 47	6 13
20°	6 0	6 0	5 57	6 3	5 54	6 6	5 51	6 9	5 48	6 12	5 47	6 13	5 45	6 15
21°	6 0	6 0	5 57	6 3	5 54	6 6	5 51	6 9	5 48	6 12	5 46	6 14	5 44	6 16
22°	6 0	6 0	5 57	6 3	5 54	6 6	5 50	6 10	5 47	6 13	5 45	6 15	5 44	6 16
23°	6 0	6 0	5 57	6 3	5 53	6 7	5 50	6 10	5 46	6 14	5 45	6 15	5 43	6 17
24°	6 0	6 0	5 57	6 3	5 53	6 7	5 49	6 11	5 46	6 14	5 44	6 16	5 42	6 18
25°	6 0	6 0	5 56	6 4	5 53	6 7	5 49	6 11	5 45	6 15	5 43	6 17	5 41	6 19
26°	6 0	6 0	5 56	6 4	5 52	6 8	5 48	6 12	5 44	6 16	5 42	6 18	5 40	6 20
27°	6 0	6 0	5 56	6 4	5 52	6 8	5 48	6 12	5 44	6 16	5 41	6 19	5 39	6 21
28°	6 0	6 0	5 56	6 4	5 51	6 9	5 47	6 13	5 43	6 17	5 41	6 19	5 38	6 22
29°	6 0	6 0	5 56	6 4	5 51	6 9	5 47	6 13	5 42	6 18	5 40	6 20	5 38	6 22
30°	6 0	6 0	5 55	6 5	5 51	6 9	5 46	6 14	5 41	6 19	5 39	6 21	5 37	6 23
31°	6 0	6 0	5 55	6 5	5 50	6 10	5 46	6 14	5 41	6 19	5 38	6 22	5 36	6 24
32°	6 0	6 0	5 55	6 5	5 50	6 10	5 45	6 15	5 40	6 20	5 37	6 23	5 35	6 25
33°	6 0	6 0	5 55	6 5	5 50	6 10	5 44	6 16	5 39	6 21	5 36	6 24	5 34	6 26
34°	6 0	6 0	5 55	6 5	5 49	6 11	5 44	6 16	5 38	6 22	5 35	6 25	5 33	6 27
35°	6 0	6 0	5 55	6 5	5 49	6 11	5 43	6 17	5 37	6 23	5 35	6 25	5 32	6 28
36°	6 0	6 0	5 55	6 5	5 48	6 12	5 42	6 18	5 37	6 23	5 34	6 26	5 31	6 29
37°	6 0	6 0	5 55	6 5	5 48	6 12	5 42	6 18	5 36	6 24	5 33	6 27	5 29	6 31
38°	6 0	6 0	5 55	6 5	5 47	6 13	5 41	6 19	5 35	6 25	5 32	6 28	5 28	6 32
39°	6 0	6 0	5 55	6 5	5 47	6 13	5 40	6 20	5 34	6 26	5 31	6 29	5 27	6 33
	sets	rises	sets	rises	sets	rises	sets	rises	sets	rises	sets	rises	sets	rises
	Sept. 19 → ← Mar. 17		Sept. 26 → ← Mar. 13		Oct. 1 → ← Mar. 8		Oct. 6 → ← Mar. 3		Oct. 11 → ← Feb. 27		Oct. 15 → ← Feb. 24		Oct. 18 → ← Feb. 21	
	0°		2°		4°		6°		8°		9°		10°	
	SOUTH DECLINATION.													

TABLE G. (CONTINUED.)

APPARENT TIME OF THE SUN'S RISING AND SETTING.

N.B. *On and after each date entered herein use the column to which it refers. The arrows indicate the order.*

Latitude.	NORTH DECLINATION.													
	11°		12°		13°		14°		15°		16°		17°	
→ ←	Apr. 17 → ← Aug. 23		Apr. 20 → ← Aug. 20		Apr. 23 → ← Aug. 17		Apr. 26 → ← Aug. 14		Apr. 29 → ← Aug. 10		May 3 → ← Aug. 7		May 6 → ← Aug. 3	
	rises	sets	rises	sets	rises	sets	rises	sets	rises	sets	rises	sets	rises	sets
	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.
0°	6 0	6 0	6 0	6 0	6 0	6 0	6 0	6 0	6 0	6 0	6 0	6 0	6 0	6 0
2°	5 59	6 1	5 58	6 2	5 58	6 2	5 58	6 2	5 58	6 2	5 58	6 2	5 58	6 2
4°	5 57	6 3	5 57	6 3	5 56	6 4	5 56	6 4	5 56	6 4	5 56	6 4	5 55	6 5
6°	5 56	6 4	5 55	6 5	5 55	6 5	5 54	6 6	5 54	6 6	5 53	6 7	5 53	6 7
8°	5 54	6 6	5 53	6 7	5 53	6 7	5 52	6 8	5 51	6 9	5 51	6 9	5 50	6 10
10°	5 52	6 8	5 52	6 8	5 51	6 9	5 50	6 10	5 49	6 11	5 49	6 11	5 48	6 12
12°	5 51	6 9	5 50	6 10	5 49	6 11	5 48	6 12	5 47	6 13	5 46	6 14	5 45	6 15
14°	5 50	6 10	5 48	6 12	5 48	6 12	5 46	6 14	5 45	6 15	5 44	6 16	5 43	6 17
16°	5 47	6 13	5 46	6 14	5 45	6 15	5 44	6 16	5 42	6 18	5 41	6 19	5 40	6 20
18°	5 46	6 14	5 44	6 16	5 43	6 17	5 41	6 19	5 40	6 20	5 39	6 21	5 37	6 23
20°	5 44	6 16	5 42	6 18	5 41	6 19	5 39	6 21	5 38	6 22	5 36	6 24	5 34	6 26
21°	5 43	6 17	5 41	6 19	5 40	6 20	5 38	6 22	5 36	6 24	5 35	6 25	5 33	6 27
22°	5 42	6 18	5 40	6 20	5 39	6 21	5 37	6 23	5 35	6 25	5 33	6 27	5 32	6 28
23°	5 41	6 19	5 39	6 21	5 38	6 22	5 36	6 24	5 34	6 26	5 32	6 28	5 30	6 30
24°	5 40	6 20	5 38	6 22	5 36	6 24	5 34	6 26	5 33	6 27	5 31	6 29	5 29	6 31
25°	5 39	6 21	5 37	6 23	5 35	6 25	5 33	6 27	5 31	6 29	5 29	6 31	5 27	6 33
26°	5 38	6 22	5 36	6 24	5 34	6 26	5 32	6 28	5 30	6 30	5 28	6 32	5 26	6 34
27°	5 37	6 23	5 35	6 25	5 33	6 27	5 31	6 29	5 29	6 31	5 26	6 34	5 24	6 36
28°	5 36	6 24	5 34	6 26	5 32	6 28	5 30	6 30	5 27	6 33	5 25	6 35	5 23	6 37
29°	5 35	6 25	5 33	6 27	5 31	6 29	5 28	6 32	5 26	6 34	5 23	6 37	5 21	6 39
30°	5 34	6 26	5 32	6 28	5 29	6 31	5 27	6 33	5 24	6 36	5 22	6 38	5 19	6 41
31°	5 33	6 27	5 31	6 29	5 28	6 32	5 26	6 34	5 23	6 37	5 20	6 40	5 18	6 42
32°	5 32	6 28	5 29	6 31	5 27	6 33	5 24	6 36	5 21	6 39	5 19	6 41	5 16	6 44
33°	5 31	6 29	5 28	6 32	5. 26	6 34	5 23	6 37	5 20	6 40	5 17	6 43	5 14	6 46
34°	5 30	6 30	5 27	6 33	5 24	6 36	5 21	6 39	5 18	6 42	5 15	6 45	5 12	6 48
35°	5 29	6 31	5 26	6 34	5 23	6 37	5 20	6 40	5 17	6 43	5 14	6 46	5 11	6 49
36°	5 28	6 32	5 24	6 36	5 21	6 39	5 18	6 42	5 15	6 45	5 12	6 48	5 9	6 51
37°	5 26	6 34	5 23	6 37	5 20	6 40	5 17	6 43	5 13	6 47	5 10	6 50	5 7	6 53
38°	5 25	6 35	5 22	6 38	5 18	6 42	5 15	6 45	5 12	6 48	5 8	6 52	5 5	6 55
39°	5 24	6 36	5 20	6 40	5 17	6 43	5 13	6 47	5 10	6 50	5 6	6 54	5 3	6 57
	sets	rises	sets	rises	sets	rises	sets	rises	sets	rises	sets	rises	sets	rises
→ ←	Oct. 21 → ← Feb. 19		Oct. 23 → ← Feb. 16		Oct. 26 → ← Feb. 13		Oct. 29 → ← Feb. 10		Nov. 1 → ← Feb. 7		Nov. 5 → ← Feb. 3		Nov. 8 → ← Jan. 31	
	11°		12°		13°		14°		15°		16°		17°	
	SOUTH DECLINATION.													

TABLE G. (CONTINUED.)

APPARENT TIME OF THE SUN'S RISING AND SETTING.

N.B. *On and after each date entered herein use the column to which it refers. The arrows indicate the order.*

Latitude.	NORTH DECLINATION. 18° rises	18° sets	19° rises	19° sets	20° rises	20° sets	21° rises	21° sets	22° rises	22° sets	23° rises	23° sets	23½° rises	23½° sets
(North dates)	May 10 → ← July 30		May 14 → ← July 26		May 18 → ← July 21		May 23 → ← July 15		May 28 → ← July 5		June 5 → ← June 29		June 14 → ←	
	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.
0°	6 0	6 0	6 0	6 0	6 0	6 0	6 0	6 0	6 0	6 0	6 0	6 0	6 0	6 0
2°	5 58	6 2	5 58	6 2	5 58	6 2	5 57	6 3	5 57	6 3	5 57	6 3	5 57	6 3
4°	5 55	6 5	5 55	6 5	5 55	6 5	5 54	6 6	5 54	6 6	5 53	6 7	5 53	6 7
6°	5 52	6 8	5 52	6 8	5 52	6 8	5 51	6 9	5 51	6 9	5 50	6 10	5 50	6 10
8°	5 50	6 10	5 49	6 11	5 49	6 11	5 48	6 12	5 47	6 13	5 47	6 13	5 46	6 14
10°	5 47	6 13	5 46	6 14	5 46	6 14	5 45	6 15	5 44	6 16	5 43	6 17	5 43	6 17
12°	5 44	6 16	5 44	6 16	5 43	6 17	5 42	6 18	5 41	6 19	5 40	6 20	5 39	6 21
14°	5 41	6 19	5 40	6 20	5 39	6 21	5 38	6 22	5 37	6 23	5 36	6 24	5 35	6 25
16°	5 39	6 21	5 37	6 23	5 36	6 24	5 35	6 25	5 33	6 27	5 32	6 28	5 31	6 29
18°	5 36	6 24	5 34	6 26	5 33	6 27	5 31	6 29	5 30	6 30	5 28	6 32	5 28	6 32
20°	5 33	6 27	5 31	6 29	5 30	6 30	5 28	6 32	5 26	6 34	5 24	6 36	5 24	6 36
21°	5 31	6 29	5 30	6 30	5 28	6 32	5 26	6 34	5 24	6 36	5 22	6 38	5 22	6 38
22°	5 30	6 30	5 28	6 32	5 26	6 34	5 24	6 36	5 22	6 38	5 21	6 39	5 20	6 40
23°	5 28	6 32	5 26	6 34	5 24	6 36	5 22	6 38	5 21	6 39	5 19	6 41	5 18	6 42
24°	5 27	6 33	5 25	6 35	5 23	6 37	5 21	6 39	5 19	6 41	5 16	6 44	5 15	6 45
25°	5 25	6 35	5 23	6 37	5 21	6 39	5 19	6 41	5 17	6 43	5 14	6 46	5 13	6 47
26°	5 24	6 36	5 21	6 39	5 19	6 41	5 17	6 43	5 15	6 45	5 12	6 48	5 11	6 49
27°	5 22	6 38	5 20	6 40	5 17	6 43	5 15	6 45	5 12	6 48	5 10	6 50	5 9	6 51
28°	5 20	6 40	5 18	6 42	5 15	6 45	5 13	6 47	5 10	6 50	5 8	6 52	5 7	6 53
29°	5 18	6 42	5 16	6 44	5 13	6 47	5 11	6 49	5 8	6 52	5 6	6 54	5 4	6 56
30°	5 17	6 43	5 14	6 46	5 11	6 49	5 9	6 51	5 6	6 54	5 3	6 57	5 2	6 58
31°	5 15	6 45	5 12	6 48	5 9	6 51	5 7	6 53	5 4	6 56	5 1	6 59	5 0	7 0
32°	5 13	6 47	5 10	6 50	5 7	6 53	5 4	6 56	5 2	6 58	4 59	7 1	4 57	7 3
33°	5 11	6 49	5 8	6 52	5 5	6 55	5 2	6 58	4 59	7 1	4 56	7 4	4 55	7 5
34°	5 9	6 51	5 6	6 54	5 3	6 57	5 0	7 0	4 57	7 3	4 53	7 7	4 52	7 8
35°	5 7	6 53	5 4	6 56	5 1	6 59	4 58	7 2	4 54	7 6	4 51	7 9	4 49	7 11
36°	5 5	6 55	5 2	6 58	4 59	7 1	4 55	7 5	4 52	7 8	4 48	7 12	4 46	7 14
37°	5 3	6 58	5 0	7 0	4 56	7 4	4 53	7 7	4 49	7 11	4 45	7 15	4 44	7 16
38°	5 1	6 59	4 58	7 2	4 53	7 7	4 50	7 10	4 46	7 14	4 43	7 17	4 41	7 19
39°	4 59	7 1	4 55	7 5	4 51	7 9	4 48	7 12	4 44	7 16	4 40	7 20	4 38	7 22
	sets	rises	sets	rises	sets	rises	sets	rises	sets	rises	sets	rises	sets	rises
(South dates)	Nov. 11 → ← Jan. 27		Nov. 15 → ← Jan. 23		Nov. 19 → ← Jan. 18		Nov. 24 → ← Jan. 13		Nov. 29 → ← Jan. 6		Dec. 6 → ← Dec. 29		Dec. 15 → ←	
SOUTH DECLINATION.	18°		19°		20°		21°		22°		23°		23½°	

TABLE H.

ECLIPSES BY NAUTICAL ALMANACK RECKONING.

N.B. *It is probable that up to A. D.* 1821 *von Oppolzer's Canon is more reliable than the Nautical Almanack.*

A. D. Year, Month, and Day.	Time measured from Lañka mean sunrise, taken as 6 A. M.				
	Greatest phase.	Beginning of Eclipse.	Period of total obscuration. Beginning.	Period of total obscuration. End.	End of Eclipse.
1	3	4	5	6	7
1768 Jan. 4........	3 32	2 26	—	—	4 37
1768 June 30........	2 53	1 6	2 18	3 27	4 40
1768 Dec. 23........	14 10	12 21	13 20	15 0	15 58
1769 June 19........	omitted in Nautical Almanack.				
1769 Dec. 13........	omitted in Nautical Almanack.				
1771 Apr. 29........	1 12	0 6	—	—	2 19
1771 Oct. 23........	15 33	14 24	—	—	16 43
1772 Apr. 17........	15 9	13 22	14 19	15 59	16 56
1772 Oct. 11........	16 17	14 19	15 25	17 9	18 15
1773 Apr. 7........	7 46	6 23	—	—	9 8
1773 Sept. 30........	16 56	15 25	—	—	18 26
1775 Feb. 15........	14 14	12 50	—	—	15 38
1775 Aug. 11........	6 19	4 50	—	—	7 48
1776 Feb. 4........	13 32	11 33	12 38	14 25	15 30
1776 July 30........	23 5	21 19	22 18	23 53	24 52
1777 Jan. 23........	15 27	14 2	—	—	16 51
1777 July 20........	11 51	11 14	—	—	12 27
1778 Dec. 4........	4 31	3 18	—	—	5 43
1779 May 30........	3 55	2 2	3 13	4 37	5 48
1779 Nov. 23........	18 48	16 58	17 58	19 38	20 38
1780 May 18........	10 1	8 24	—	—	11 38
1780 Nov. 12........	3 21	1 55	—	—	4 48
1782 Mar. 29........	7 26	6 5	—	—	8 47
1782 Sept. 21........	13 20	12 16	—	—	14 24
1783 Mar. 18........	20 34	18 42	19 43	21 25	22 26
1783 Sept. 10........	22 35	20 44	21 44	23 26	24 26
1784 Mar. 7........	2 42	1 31	—	—	3 54
1784 Aug. 30........	13 48	12 26	—	—	15 10
1786 Jan. 14........	11 57	10 46	—	—	13 8
1786 July 11........	9 49	8 4	9 29	10 8	11 33
1787 Jan. 3........	22 56	21 8	22 6	23 45	24 43
1787 June 30........	13 35	11 43	12 59	14 10	15 26
1787 Dec. 24........	14 10	12 45	—	—	15 36
1789 May 9........	8 31	7 27	—	—	9 23
1789 Nov. 2........	23 19	22 15	—	—	24 24
1790 Apr. 28........	23 3	21 16	22 14	23 51	24 49
1790 Oct. 22........	23 42	21 44	22 51	24 34	25 41
1791 Apr. 18........	15 44	14 18	—	—	17 11
1791 Oct. 11........	24 26	22 50	—	—	26 1
1793 Feb. 25........	22 1	20 40	—	—	23 23
1793 Aug. 21........	13 59	12 35	—	—	15 23
1794 Feb. 14........	21 24	19 25	20 31	22 17	23 22

TABLE H. (CONTINUED.)

ECLIPSES BY NAUTICAL ALMANACK RECKONING.

N.B. *It is probable that up to A. D.* 1821 *von Oppolzer's Canon is more reliable than the Nautical Almanack.*

A. D. Year, Month, and Day.	Time measured from Laṅka mean sunrise, taken as 6 A. M. — Greatest phase.	Beginning of Eclipse.	Period of total obscuration. — Beginning.	Period of total obscuration. — End.	End of Eclipse.
1	3	4	5	6	7
1794 Aug. 11........	6 32	4 44	5 42	7 22	8 19
1795 Feb. 3........	23 42	22 16	—	—	25 8
1795 July 31.......	18 51	17 56	—	—	19 47
1796 Dec. 14........	13 19	12 7	—	—	14 32
1797 June 9........	10 32	8 43	10 0	11 4	12 21
1797 Dec. 4........	3 21	1 31	2 30	4 11	5 11
1798 May 29........	17 10	15 27	16 45	17 35	18 53
1798 Nov. 23........	11 28	9 59	—	—	12 56
1800 Apr. 9........	15 28	14 11	—	—	16 46
1800 Oct. 2........	20 48	19 53	—	—	21 43
1801 Mar. 30........	4 27	2 35	3 35	5 19	6 19
1801 Sept. 22........	6 21	4 32	5 32	7 10	8 10
1802 Mar. 19........	10 17	9 1	—	—	11 34
1802 Sept. 11........	21 39	20 13	—	—	23 5
1804 Jan. 26........	20 23	19 13	—	—	21 32
1804 July 22........	16 40	15 1	—	—	18 19
1805 Jan. 15........	7 43	5 55	6 53	8 32	9 30
1805 July 11........	20 7	18 12	19 22	20 52	22 2
1806 Jan. 4........	23 3	21 37	—	—	24 29
1807 May 21........	15 51	15 8	—	—	16 34
1807 Nov. 15........	7 12	6 11	—	—	8 13
1808 May 10........	6 40	4 55	5 53	7 27	8 25
1808 Nov. 3........	7 16	5 19	6 26	8 5	9 12
1809 Apr. 29........	23 42	22 11	—	—	25 12
1809 Oct. 23........	8 5	6 28	—	—	9 42
1811 Mar. 10........	5 41	4 24	—	—	6 58
1811 Sept. 2........	21 45	20 26	—	—	23 3
1812 Feb. 27........	5 8	3 10	4 16	6 0	7 6
1812 Aug. 22........	14 4	12 15	13 13	14 55	15 53
1813 Feb. 15........	7 54	6 28	—	—	9 20
1813 Aug. 12........	1 56	0 49	—	—	3 3
1814 Dec. 26........	22 11	21 0	—	—	23 22
1815 June 21........	17 9	15 25	17 2	17 16	18 53
1815 Dec. 16........	11 58	10 10	11 9	12 47	13 46
1816 June 9........	24 17	22 32	23 41	24 53	26 3
1816 Dec. 4........	19 38	18 9	—	—	21 8
1818 Apr. 20........	23 23	22 13	—	—	24 34
1818 Oct. 14........	4 28	3 42	—	—	5 14
1819 Apr. 10........	12 11	10 20	11 20	13 2	14 2
1819 Oct. 3........	14 16	12 28	13 28	15 4	16 4
1820 Mar. 29........	17 46	16 25	—	—	19 7
1820 Sept. 22........	5 38	4 9	—	—	7 6
1822 Feb. 6........	4 46	3 38	—	—	5 54
1822 Aug. 2........	23 30	21 58	—	—	25 2
1823 Jan. 26........	16 28	14 41	15 39	17 17	18 14

TABLE H. (CONTINUED.)

ECLIPSES BY NAUTICAL ALMANACK RECKONING.

N.B. *It is probable that up to A. D. 1821 von Oppolzer's Canon is more reliable than the Nautical Almanack.*

A. D. Year, Month, and Day.	Time measured from Laṅka mean sunrise, taken as 6 A. M.				
	Greatest phase.	Beginning of Eclipse.	Period of total obscuration. Beginning.	Period of total obscuration. End.	End of Eclipse.
1	3	4	5	6	7
1823 July 23	2 35	0 39	1 46	3 25	4 31
1824 Jan. 16	7 57	6 31	—	—	9 22
1824 July 11	3 18	2 34	—	—	4 2
1825 May 31	23 9	22 54	—	—	23 23
1825 Nov. 25	15 12	14 15	—	—	16 9
1826 May 21	14 18	12 35	13 35	15 1	16 1
1826 Nov. 14	14 59	13 3	14 11	15 47	16 55
1827 May 11	7 19	5 46	*	*	8 53
1827 Nov. 3	15 57	14 19	—	—	17 35
1829 Mar. 20	13 11	12 0	—	—	14 23
1829 Sept. 13	5 36	4 24	—	—	6 48
1830 Mar. 9	12 46	10 49	11 54	13 38	14 43
1830 Sept. 2	21 41	19 53	20 51	22 31	23 29
1831 Feb. 26	15 59	14 30	—	—	17 27
1831 Aug. 23	9 3	7 47	—	—	10 19
1833 Jan. 6	7 2	5 52	—	—	8 13
1833 July 1	23 45	22 7	—	—	25 23
1833 Dec. 26	20 35	18 46	19 46	21 24	22 24
1834 June 21	7 23	5 35	6 40	8 5	9 10
1834 Dec. 16	3 51	2 22	—	—	5 20
1835 June 10	21 39	21 10	—	—	22 7
1836 May 1	7 9	6 7	—	—	8 12
1836 Oct. 24	12 17	11 41	—	—	12 53
1837 Apr. 20	19 44	17 53	18 54	20 34	21 35
1837 Oct. 13	22 20	20 34	21 34	23 6	24 6
1838 Apr. 9	25 2	23 35	—	—	26 28
1838 Oct. 3	13 44	12 13	—	—	15 15
1840 Feb. 17	13 5	11 59	—	—	14 11
1840 Aug. 13	6 26	5 1	—	—	7 51
1841 Feb. 5	25 10	23 23	24 21	25 58	26 56
1841 Aug. 2	9 4	7 7	8 12	9 56	11 1
1842 Jan. 26	16 47	15 21	—	—	18 13
1842 July 22	9 50	8 48	—	—	10 53
1843 Dec. 6	23 14	22 21	—	—	24 7
1844 May 31	21 53	20 12	21 15	22 31	23 34
1844 Nov. 24	22 48	20 53	22 1	23 34	24 42
1845 May 21	14 57	13 20	14 34	15 20	16 34
1845 Nov. 13	23 52	22 13	—	—	25 31
1847 Mar. 31	20 29	19 26	—	—	21 32
1847 Sept. 24	13 36	12 30	—	—	14 43
1848 Mar. 19	20 15	18 19	19 24	21 6	22 11
1848 Sept. 13	5 22	3 34	4 33	6 11	7 10
1849 Mar. 8	23 58	22 28	—	—	25 28
1849 Sept. 2	16 13	14 50	—	—	17 36
1851 Jan. 17	15 53	14 43	—	—	17 3

* The Nautical Almanack gives the eclipse as not quite total the digits eclipsed being $11° 47\frac{1}{2}'$.

TABLE H. (CONTINUED.)

ECLIPSES BY NAUTICAL ALMANACK RECKONING.

N.B. *It is probable that up to A. D.* 1821 *von Oppolzer's Canon is more reliable than the Nautical Almanack.*

A. D. Year, Month, and Day.	Time measured from Laṅka mean sunrise, taken as 6 A. M. Greatest phase.	Beginning of Eclipse.	Period of total obscuration. Beginning.	End.	End of Eclipse.
1	3	4	5	6	7
1851 July 13........	6 24	4 53	—	—	7 55
1852 Jan. 7........	5 13	3 24	4 24	6 2	7 2
1852 July 1........	14 29	12 40	13 41	15 16	16 17
1852 Dec. 26........	12 6	10 36	—	—	13 35
1853 June 21........	5 4	4 16	—	—	5 53
1854 May 12........	14 49	13 56	—	—	15 41
1854 Nov. 4........	20 15	19 48	—	—	20 42
1855 May 2........	3 8	1 17	2 20	3 56	4 59
1855 Oct. 25........	6 32	4 47	5 48	7 16	8 18
1856 Apr. 20........	8 9	6 37	—	—	9 42
1856 Oct. 13........	21 57	20 24	—*	—*	23 30
1858 Feb. 27........	21 17	20 13	—	—	22 20
1858 Aug. 24........	13 23	12 7	—	—	14 40
1859 Feb. 17........	9 46	8 0	8 58	10 34	11 32
1859 Aug. 13........	15 37	13 39	14 44	16 30	17 35
1860 Feb. 6†.......	25 32	24 5	—	—	26 59
1860 Aug. 1........	16 28	15 11	—	—	17 44
1861 Dec. 17........	7 21	6 30	—	—	8 12
1862 June 12........	5 24	3 45	4 53	5 55	7 3
1862 Dec. 6........	6 43	4 49	5 58	7 29	8 38
1863 June 1........	22 29	20 49	21 56	23 2	24 9
1863 Nov. 25........	7 59	6 19	—	—	9 39
1865 Apr. 11........	3 41	2 48	—	—	4 34
1865 Oct. 4........	21 43	20 42	—	—	22 44
1866 Mar. 31........	3 36	1 41	2 47	4 25	5 31
1866 Sept. 24........	13 10	11 23	12 22	13 58	14 57
1867 Mar. 20........	7 52	6 19	—	—	9 25
1867 Sept. 13........	23 29	22 0	—	—	24 58
1869 Jan. 27........	24 41	23 32	—	—	25 50
1869 July 23........	13 6	11 43	—	—	14 28
1870 Jan. 17........	13 49	12 0	13 0	14 38	15 38
1870 July 12........	21 37	19 47	20 47	22 27	23 27
1871 Jan. 6........	20 19	18 49	—	—	21 49
1871 July 2........	12 31	11 29	—	—	13 32
1872 May 22........	22 21	21 44	—	—	22 59
1872 Nov. 15........	4 22	4 5	—	—	4 40
1873 May 12........	10 23	8 33	9 38	11 8	12 13
1873 Nov. 4........	14 54	13 10	14 11	15 37	16 38
1874 May 1........	15 6	13 28	—	—	16 44
1874 Oct. 25........	6 19	4 45	6 3	6 36	7 54
1876 Mar. 10........	5 24	4 24	—	—	6 24
1876 Sept. 3........	20 25	19 18	—	—	21 32
1877 Feb. 27........	18 18	16 33	17 30	19 6	20 4
1877 Aug. 23........	22 14	20 17	21 22	23 7	24 12
1878 Feb. 17........	10 14	8 46	—	—	11 42

* The Nautical almanack gives this as not quite total, the digits eclipsed being 0.994.

† The day is really the 7th (1.32, etc.). The entry of the sixth is retained for comparison with Table E.

TABLE H. (CONTINUED)

ECLIPSES BY NAUTICAL ALMANACK RECKONING.

N.B. *It is probable that up to A. D.* 1821 *von Oppolzer's Canon is more reliable than the Nautical Almanack.*

A. D. Year, Month, and Day.	Time measured from Laṅka mean sunrise, taken as 6 A. M.				
	Greatest phase.	Beginning of Eclipse.	Period of total obscuration. Beginning.	Period of total obscuration. End.	End of Eclipse.
1	3	4	5	6	7
1878 Aug. 12........	23 11	21 46	—	—	24 37
1879 Dec. 28........	15 29	14 40	—	—	16 18
1880 June 22........	12 53	11 18	12 34	13 12	14 28
1880 Dec. 16........	14 42	12 48	13 57	15 27	16 36
1881 June 12........	5 56	4 14	5 17	6 36	7 39
1881 Dec. 5........	16 11	14 31	—*	—*	17 52
1883 Apr. 22........	10 42	10 6	—	—	11 17
1883 Oct. 16........	5 57	5 2	—	—	6 53
1884 Apr. 10........	10 50	8 56	10 3	11 36	12 44
1884 Oct. 4........	21 5	19 18	20 19	21 51	22 52
1885 Mar. 30........	15 37	14 2	—	—	17 13
1885 Sept. 24........	6 51	5 18	—	—	8 25
1887 Feb. 8........	9 25	8 17	—	—	10 33
1887 Aug. 3........	19 52	18 39	—	—	21 5
1888 Jan. 28........	22 23	20 34	21 34	23 12	24 12
1888 July 23........	4 48	2 58	3 57	5 39	6 38
1889 Jan. 17........	4 33	3 2	—	—	6 4
1889 July 12........	19 57	18 46	—	—	21 8
1890 June 3........	†	†	†	†	†
1890 Nov. 26........	12 37	12 32	—	—	12 42
1891 May 23........	17 32	15 44	16 52	18 12	19 20
1891 Nov. 15........	23 22	21 38	22 40	24 4	25 6
1892 May 11........	21 56	20 13	—	—	23 40
1892 Nov. 4........	14 48	13 12	14 24	15 12	16 24
1894 Mar. 21........	13 24	12 29	—	—	14 18
1894 Sept. 15........	3 35	2 39	—	—	4 30
1895 Mar. 11........	2 42	0 57	1 55	3 30	4 28
1895 Sept. 4........	5 0	3 3	4 10	5 50	6 57
1896 Feb. 28........	18 49	17 19	—	—	20 19
1896 Aug. 23........	6 0	4 27	—	—	7 33
1898 Jan. 7........	23 38	22 50	—	—	24 25
1898 July 3........	20 21	18 49	—	—	21 52
1898 Dec. 27........	22 45	20 51	22 0	23 30	24 39
1899 June 23........	13 21	11 36	12 36	14 6	15 6
1899 Dec. 16........	24 29	22 48	—§	—§	26 10
1900 June 13........	2 31	2 27	—		2 34

* The Nautical Almanack makes this eclipse just short of total.

† The Canon gives a very small eclipse. The *Nautical Almanack* and *Connaissance des Temps*, none.

§ The Nautical Almanack makes this Eclipse just short of total.

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